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BUYERS' DIRECTORY

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AGENTS & INVESTORS.

ARTIFICIAL SILK.

BANDINGS & BINDS.

BLEACHING & SIZING INGREDIENTS.

BLEACHING, DYEING, FINISHING AND SIZING MACHINERY.

BOBBINS, SHUTTLES AND PINS.

BELTINGS.

BOILERS.

CARDING MACHINERY.

CARD CLOTHING.

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Nowrosjee Wadia & Sons.
Sulzer Bruderer & Co.
Tatham William, Ltd.

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Mehta, P. N., & Co.
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Robert Hall & Sons (Bury), Ltd.
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Mehta, P. N., & Co.

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Giacomo Jucker.
Hick Hargreaves & Co., Ltd.
Swiss Locomotive & Machine Works.

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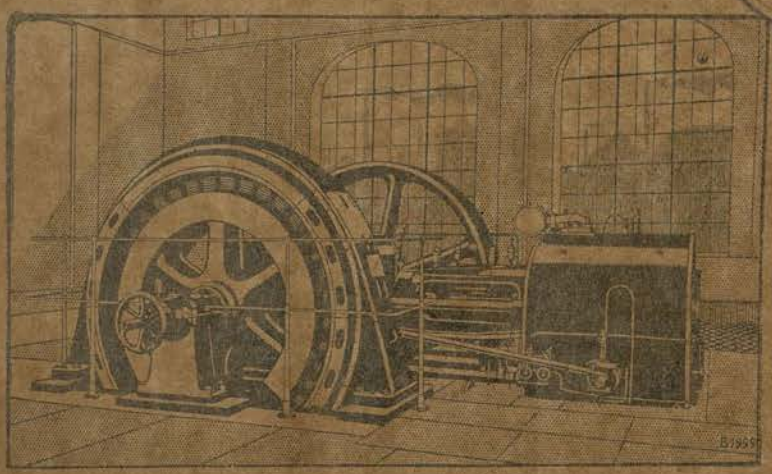

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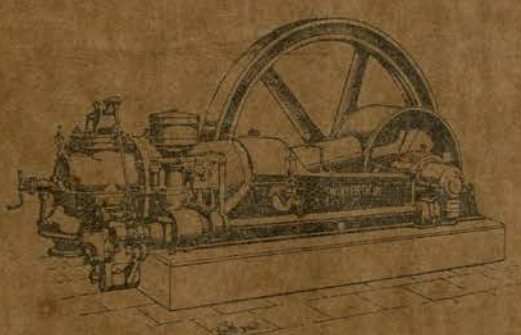

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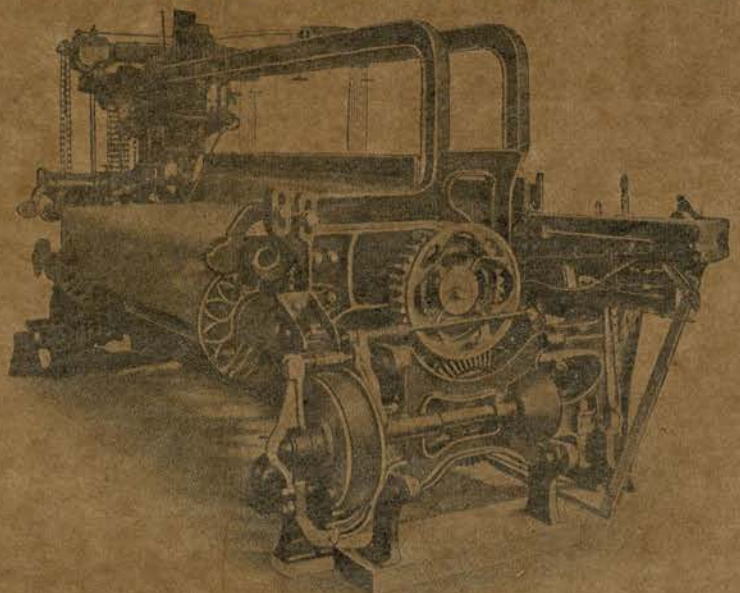

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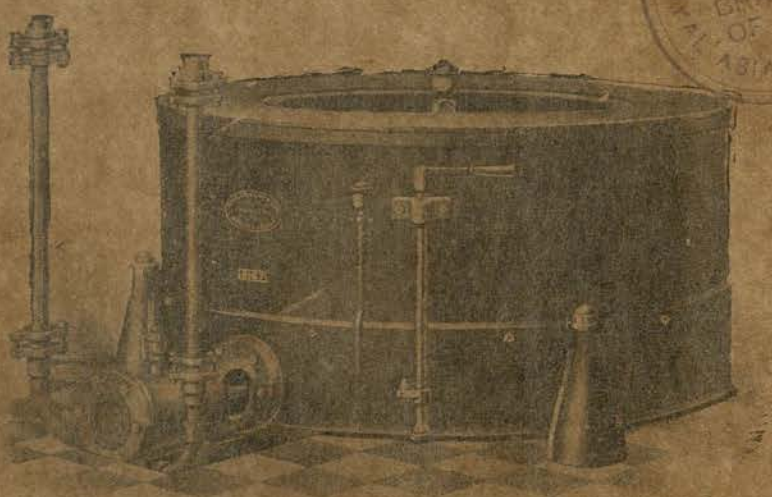

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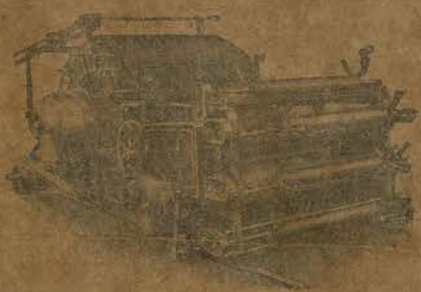

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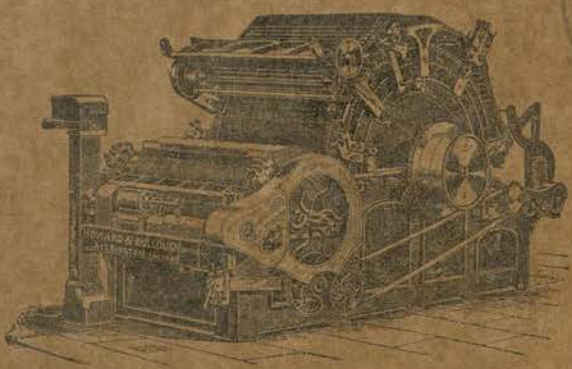

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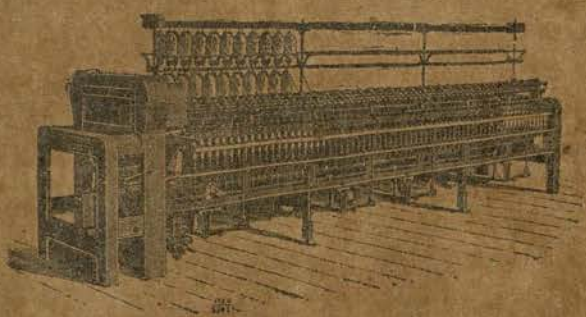

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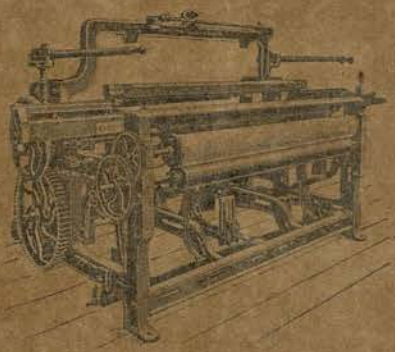

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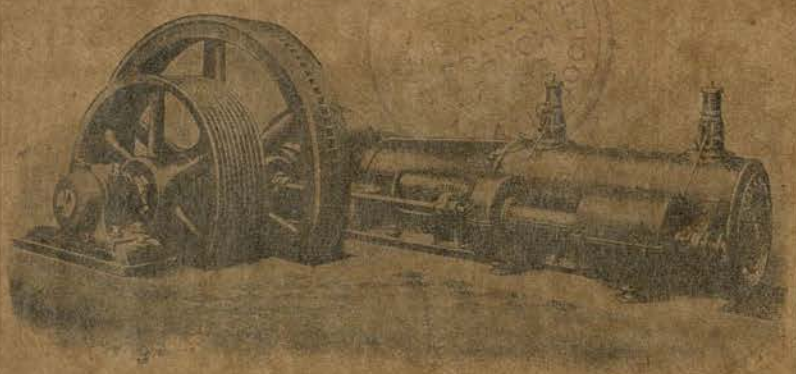

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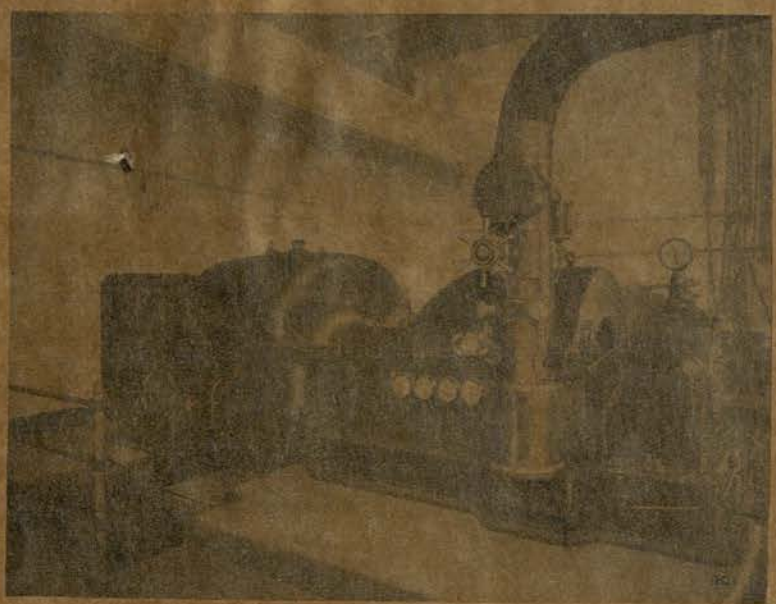

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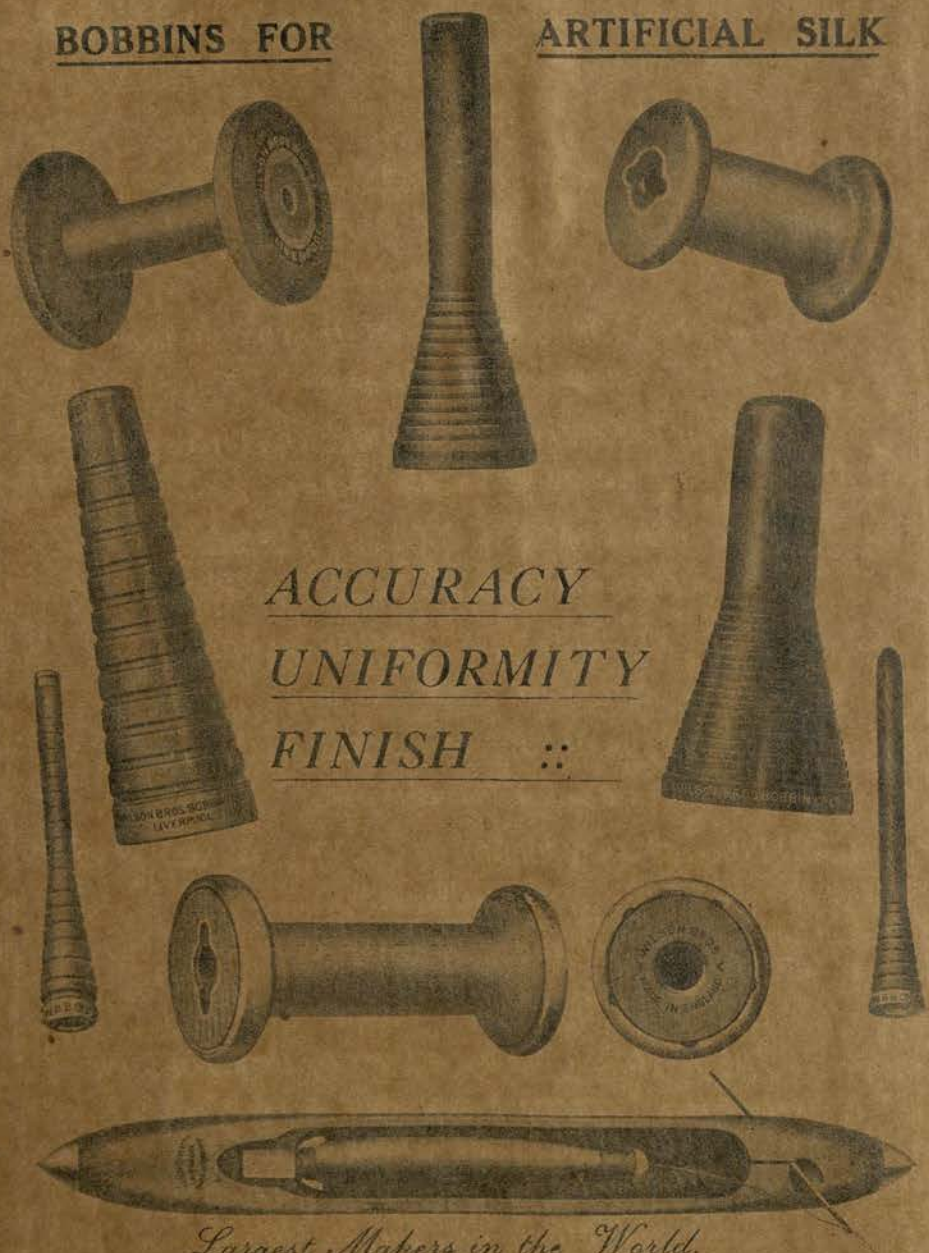

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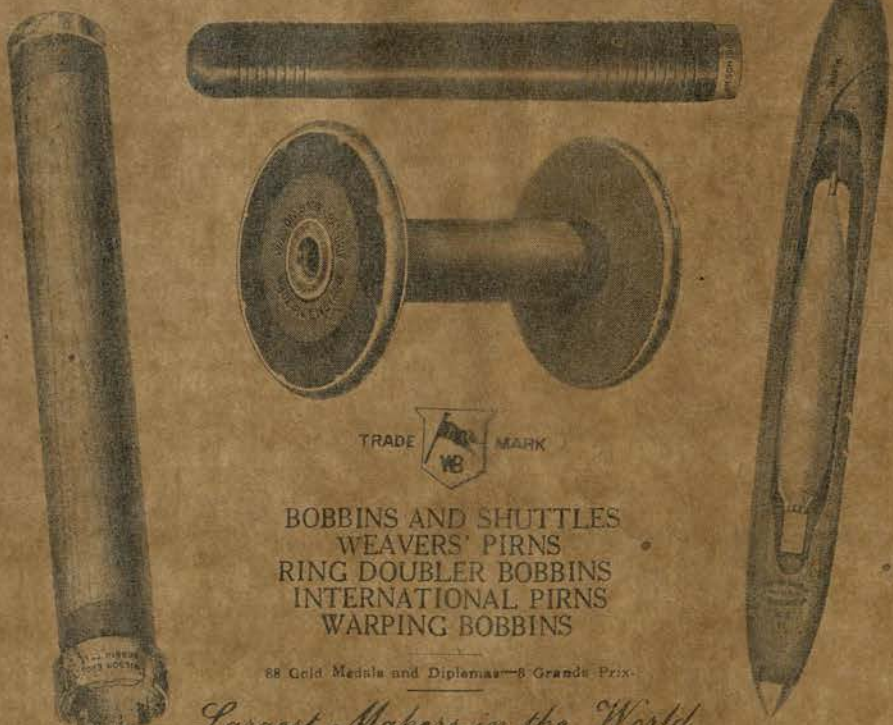

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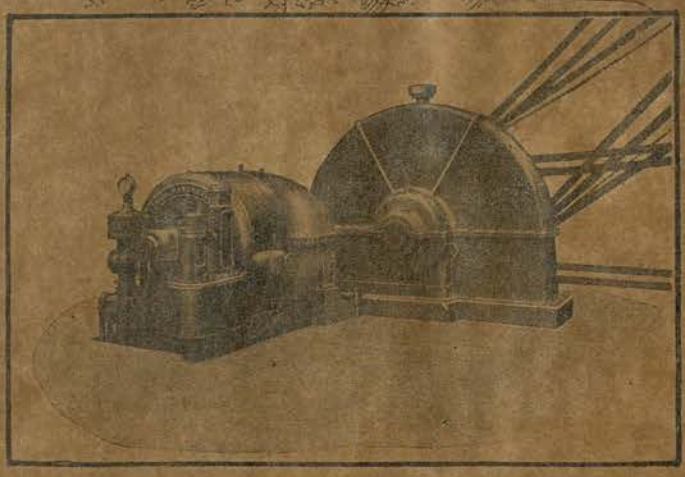

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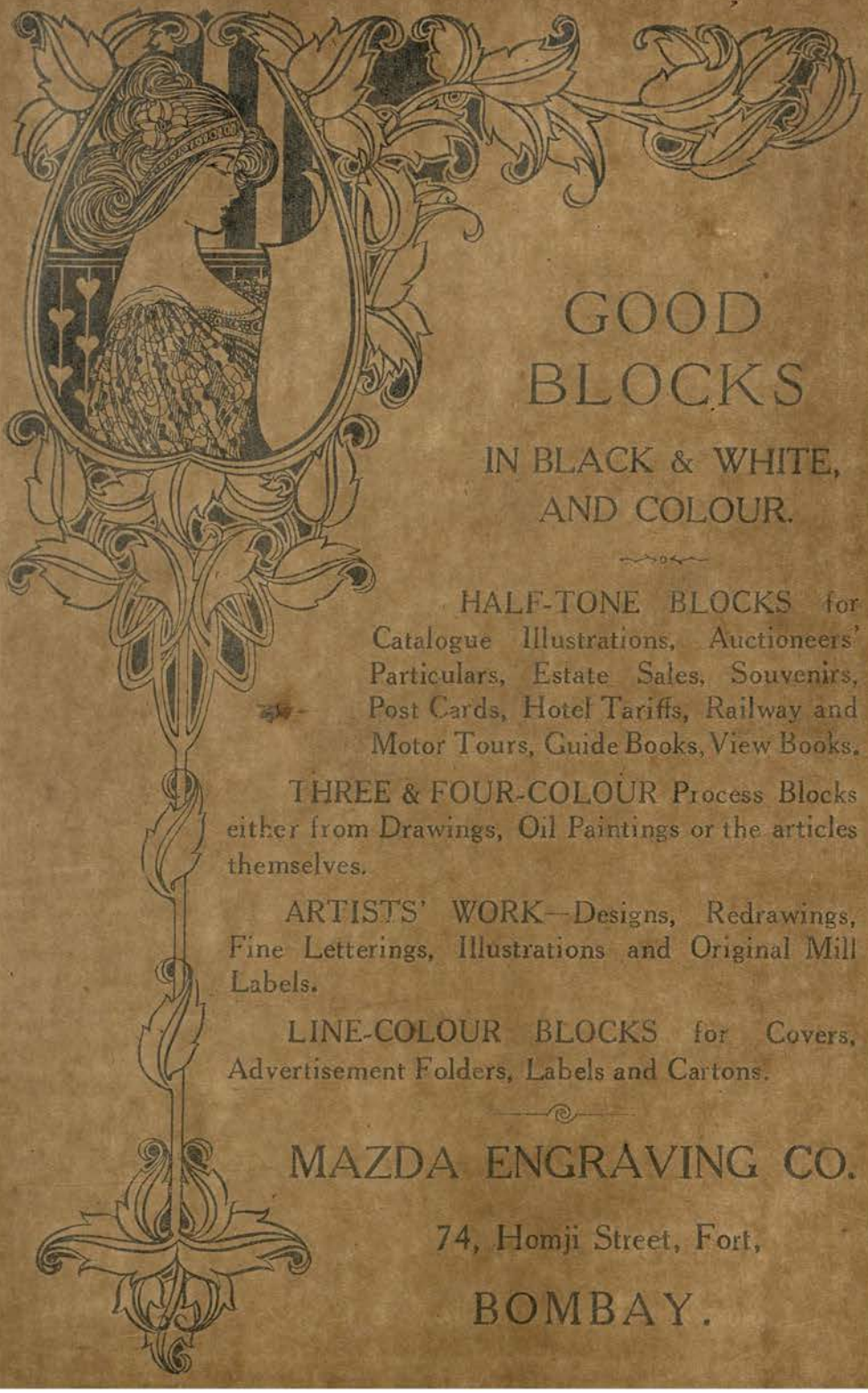

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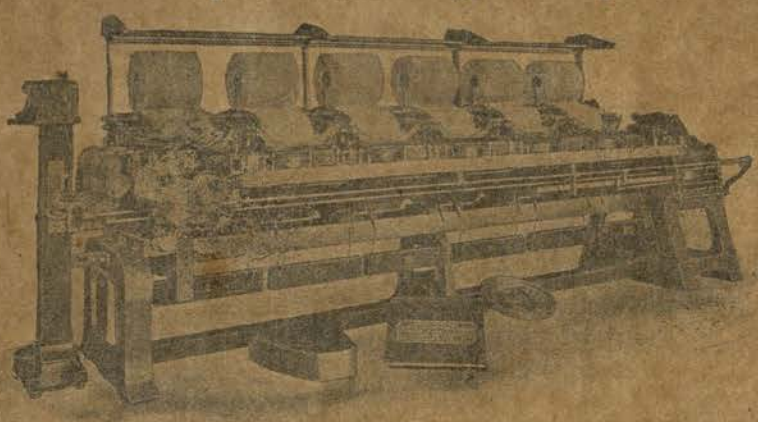

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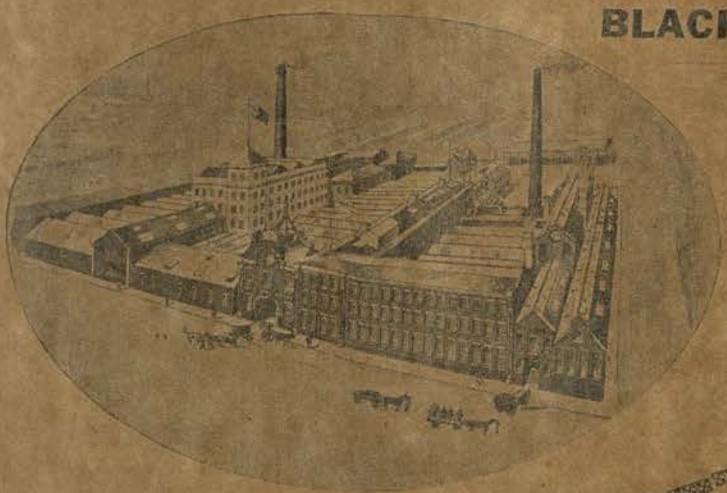

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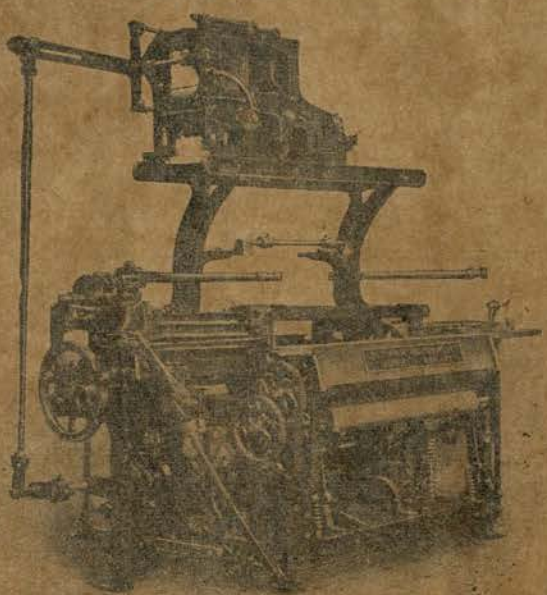

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BOMBAY INDUSTRIES:
THE COTTON MILLS.

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THE INDIAN SPINNING WHEEL OR "CHARKA."

BOMBAY INDUSTRIES:

THE COTTON MILLS.

A REVIEW OF THE PROGRESS OF THE TEXTILE INDUSTRY IN BOMBAY FROM 1850 TO 1926 AND THE PRESENT CONSTITUTION, MANAGEMENT AND FINANCIAL POSITION OF THE SPINNING AND WEAVING FACTORIES.

EDITED BY

S. M. RUTNAGUR, J.P., M.R.S.A. (LOND.)

EDITOR, "INDIAN TEXTILE JOURNAL"; EDITOR AND COMPILER, "ELECTRICITY IN INDIA" (1912); EDITOR, "MEN AND WOMEN OF INDIA," PUBLISHED UNDER THE PATRONAGE OF H. E. THE VICEROY OF INDIA, H. E. THE GOVERNOR OF BOMBAY AND H. E. THE GOVERNOR OF MADRAS (1908); JOINT EDITOR, "INDIAN MUNICIPAL JOURNAL AND SANITARY RECORD" (1900 TO 1903); "DIRECTORY OF INDIAN MANUFACTORIES" (1894-95).

LIBRARY OF THE BOMBAY BRANCH OF THE ROYAL ASIATIC SOCIETY

Price Rs. 20

(Indian Postage Rs. 1/12 and Foreign Postage Rs. 2 Extra)

99. n. 45.

PUBLISHED BY

THE INDIAN TEXTILE JOURNAL LIMITED

MILITARY SQUARE, FORT, BOMBAY.

677.2/095479
Rut / Bot
40570

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AUTHOR'S PREFACE.

EARLY in 1925, the author undertook the editing of a publication under the title of "Bombay Industries," and reviewing the progress made by the city in her manufactories and industrial undertakings. The work was to include the cotton mills, the engineering works, the docks, the railways and tramways and other public utility concerns. The importance, however, of the textile industry and the magnitude and far-reaching influences of its operations have justified the issue of the first edition in its present form.

The history of the cotton mills of Bombay is the history of the expansion of the trades and industries of Western India, her prosperity and the well-being of her inhabitants.

The opening chapter describes the progress of the industry from 1851, when the pioneer factory was projected, to the present day—a period of 75 years, during which nearly 100 mills were erected of which 18 have been destroyed by fire or dismantled leaving 82 whose aggregate capacity in spindles and looms exceeds that of the 126 factories in other parts of the Presidency and wh[illegible]ut-put is also in excess of the combined output of the 125 factories in th[illegible]t of India. This has brought about an enormous expansion in the import and export trade of the city and in her industrial and financial undertakings and it is the author's privilege to record the progress and the enterprise of citizens who pioneered and developed the industry and helped to transform the fishing village of Bombay into *Urbs Prima in Indis*.

In addition to the increase in the number of cotton mills the millowners have kept themselves abreast of the times in the introduction of fancy weaving, bleaching, finishing and dyeing. The electric drive has been installed in practically every factory with humidifying plants and ventilating appliances. The technical and supervising staff has been better organized than in previous years and while the employers have not been fortunate in securing from the operative the desired efficiency and regularity of attendance, his home life and wages and his attitude towards the jobbers and labour leaders have undergone notable changes which should lead towards a better understanding between capital and labour.

As the largest organisation of employers in the country, the activities of the Bombay Millowners' Association have been in greater evidence under the administration of practical workers experienced in the technical and commercial departments of the industry.

The irregularities in the management of cotton mills have been the subject of public criticism from time to time and the author himself had occasion to refer to instances of mismanagement in the editorial columns of the *Indian Textile Journal* to which reference has been made in the present volume. The irregularities of the past have not, however, been noticeable in recent years except in rare instances. Mill agencies have been invariably handed down from father to son and when the successors turned out incompetent or neglected the concerns and

claimed the commission on production during periods of general depression or losses they naturally incurred the displeasure of investors and brought discredit on the agency system. On the other hand, the more enlightened section of mill agents have not only improved and extended their concerns but have helped forward the development of the industry and the well-being of the labouring classes. Housing accommodation, free medical relief, maternity homes, hospitals, Co-operative Credit Societies and other comforts have been provided for the operatives by the leading millowners in Bombay which surpass in their magnitude and munificence the combined Welfare activities of all other centres of the mill industry in India.

A noteworthy feature in the personnel of mill promoters and the capitalists who have contributed towards the development of the industry has been the absence of higher University education and their general indifference towards politics. A large number of the millowners have, however, taken an active part in public affairs and in the municipal government of the city and have co-operated loyally with Government during political disturbances and other emergencies.

In addition to the members of the agents' firm a large and representative body of Bombay citizens, including import and export merchants, doctors, lawyers, journalists, members of the Legislative Councils and ministers, have been interested in or connected with the cotton mills as will be seen from the biographical notes and sketches at the end of the volume.

The acute trade depression, the prolonged strike of the workpeople, the repeal of the Excise Duty and the enquiry by the Textile Tariff Board have been the outstanding features of the Bombay mill industry during the preparatory stage of this publication and the latest information and figures regarding the financial position of the mills have been embodied in the opening pages.

The chapters on mill promoters, agents, directors and the mill staff and on the life and work of the operative represent the author's own views and experience of the working of the cotton mills in Bombay. Excepting the statistical figures and the trade reports and abstracts, almost the whole of the contents of the present volume has been edited and compiled by the author from his own notes and from the files of the *Indian Textile Journal* since 1890. The figures indicating the financial position of the cotton mills, the profits and losses, the names of machinery suppliers and other information regarding the factories have been specially compiled for this publication and verified by the mill agents.

S. M. RUTNAGUR.

August, 1927.

GOVERNOR OF BOMBAY

GOVERNMENT HOUSE
GANESHKHIND

7th July 1927.

The mill industry in Bombay has rightly been called the foremost indigenous industry of India. From small beginnings, three quarters of a century ago, the industry now is one of international importance, and, in the prosperity and welfare of Bombay, plays a great and all important part.

Mr. Rutnagar has written a book which must be of interest to a very large public. He has reviewed the progress of the industry from its inception, he deals fully with the statistics and trade figures, he has included many interesting pictures and photographs, and he has, in fact, written a Review which is as interesting to the ordinary reader as it is to those who are primarily responsible for the prosperity of this great industry.

Leslie Wilson.

N.B.—Certain sections of this Book were printed before the publication of the Honours List for 1926-27 and the names of the following citizens should be read as under :—

Sir Ness Wadia, K.B.E., C.I.E., M.I.M.E.

Hon. Sir Manmohandas Ramji, Kt.

Hon. Sir Phiroze Sethna, Kt., O.B.E.

Sir Lalubhai Samaldas, Kt., C.I.E.

Sir Cowasji Jehangir (Junior), K.C.I.E., C.I.E., O.B.E.

Obituary.

Sir Sassoon David (Baronet), K.C.S.I.

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(See pages 2 to 5 for latest figures.)

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PUBLISHERS' ANNOUNCEMENT.

THE claim of Bombay City as the *Urbs Prima in Indis* might be appropriately supported by a record of her industrial and trade activities and of the financial enterprise of her citizens which have contributed towards the prosperity and well-being of the people.

Originally a small fishing village, Bombay now stands foremost in her manufacturing industries and commercial ventures with a population of 1,200,000 inhabitants and her numerous spinning and weaving factories, engineering and electrical works, railways and tramways, motor works, iron and brass foundries, gas works, tanneries, flour mills, saw mills and various other establishments which obtain their shipping facilities through an extensive range of well-equipped docks. The introduction by Messrs. Tata Sons of iron and steel manufacture in India on a large scale and the electrification of Bombay city and suburbs by current supplied from the Tata hydro-electric works have been among the most prominent features of the industrial development we have witnessed in recent years.

The publishers of the INDIAN TEXTILE JOURNAL propose to supply reliable information under the title of "BOMBAY INDUSTRIES" regarding the working of these enterprises and undertakings which would prove useful to investors and others interested in these and similar concerns and also serve as a guide to the future development of the city's resources.

"Bombay Industries : The Cotton Mills."

The enormous expansion of Bombay's trades and industries and her prosperity have, however, been dependent mainly upon the spinning and weaving factories and on their influence on the social and economic welfare of her inhabitants. It has therefore been decided to issue the first volume of the publication under the above title and devote it to a review of the history and progress of the cotton mills with useful information concerning the constitution, management and financial position of the 82 factories which are now in operation.

The editing has been undertaken by Mr. S. M. Rutnagur who has had practical training and experience of cotton mill management and has been in touch with the progress and working of the textile and allied industries as founder and editor of the INDIAN TEXTILE JOURNAL since 1890. The work has involved considerable time and labour, as in addition to the collection of information regarding the history of the industry since its inception in 1850, other authentic particulars had to be obtained indicating the financial position and working of the surviving factories after the cessation of the world war to the present day.

The articles and other contents of this volume and the photographs and illustrations, whose source has not been acknowledged, are the Copyright of the Publishers.

The Mill Industry in Bombay.

When His late Majesty Edward VII visited this city as Prince of Wales in 1875, he referred to the importance of the port as a great manufacturing centre, and complimented the Parsi and Bhatia merchants on their foresight and enterprise in starting spinning and weaving factories which were destined to revolutionize the industrial situation in India, and bring prosperity to the commercial communities. The Town and Island of Bombay contained in those days the small cluster of pioneer factories at the foot of Cumballa Hill and about a dozen more that were scattered over the Parel district on the way to Government House where the Prince was residing. Their total capacity came to 750,000 spindles, 8,000 looms and 14,000 workpeople; when H. H. The Prince of Wales landed in Bombay in 1921 the spindles had increased to 3,430,000 with 71,000 looms and 148,000 workpeople.

The 334 mills which are now working in the country contain *8,713,000 spindles, 159,500 looms and 374,000 workpeople distributed as under :—

	Mills.	*Spindles.*	*Looms.*	*Workpeople.*
Town and Island of Bombay ..	83	3,472,000	73,700	150,000
Other towns in the Presidency ..	126	2,418,000	48,400	99,000
All other Provinces in India ..	125	2,823,000	37,400	125,000
	334	8,713,000	159,500	374,000

Thus the spinning and weaving power of Bombay city alone not only exceeds the combined output of the 126 factories in other parts of the Bombay Presidency but also exceeds the total production of the 125 factories working in the Bengal and Madras Presidencies, in Central India, the United Provinces, the Central Provinces and all other parts of the country.

* Millowners' Report.

Bombay Cotton Mills : Profit and Loss for 1927.

Ref : Page	*Mills.*	*Profit.* Rs.	*Loss.* Rs.
206	Apollo	....	1,50,480
180	Bradbury	....	33,270
172	Crescent	34,230	....
158	Currimbhoy	....	1,61,170
92	Coorla	1,71,200	....
136	Crown	3,19,600	....
208	Elphinstone	....	2,88,470
162	Fazulbhoy	2,91,000	....
126	Hindoostan	4,41,180	....
132	Indian Manufacturing	2,90,160	....
174	Kastoorchand	1,76,850	....
150	Kilachand	....	2,65,850
140	Madhowji Dharamsi	45,350	....
178	Madharao Scindia	....	2,24,830
176	Mathradas	....	3,19,190
134	New Kaiser-i-Hind	2,58,809	....
170	Pearl ..	2,94,520	....
164	Pabaney ..	....	86,080
166	Premier ..	18,460	....
144	Sir Shapurji Broacha	....	13,43,290
128	Western India	2,30,060	....

(For figures for 1920 to 1924 refer to the pages in the first column and for 1925-26 see page 5

Bombay Cotton Mills : Latest Figures.

Share Capital : Profit : Loss.

THE financial position of the 64 joint stock mill companies in Bombay has been shown, with other particulars, on pages 75 to 243. For indicating the profits and losses and the general financial position of each concern the period 1920 to 1924 was selected in order to give an idea of the earning capacity of the different companies during the boom period in 1920-22 and the period of depression in 1923-24. When the printing of this publication was taken in hand, the mill industry was passing through critical times, having witnessed the longest strike of the work-people in its history. The Balance Sheets and Profit and Loss accounts of several concerns were delayed and it was not possible then to publish the profit and loss figures for 1925 and 1926 which are now presented in a supplementary form on page 5, those available for 1927 being shown on page 2.

Important changes have also taken place in the Share Capital of the following Mill Companies whose position in 1920-24 has been recorded on the pages quoted at the end of the notes :—

THE ALLIANCE MILLS have been placed under voluntary liquidation. (Pages 148.)

...ERJEE MILL CO., LTD., has reduced its capital from Rs. 40 ... lakhs. (Pages 40, 110.)

THE JIVARAJ BALLOO MILLS have been placed under voluntary liquidation. (Pages 42, 184.)

THE PLANET MILLS have been sold under orders of the Court to Raja Partap-...iji Narsingiriji for Rs. 16,60,000, and now called the Pralhad Mills. (Pages 44, ...)

THE DIAMOND MILLS have been purchased by a Japanese Syndicate for ... 14,80,000 and converted into the Toyo Podar Cotton Mills Ltd. (Pages 41, 44, 597.)

THE STANDARD MILLS CO., LTD., has been wound up voluntarily with a view to reconstruction, Mr. Mafatlal Gagalbhai being appointed liquidator without remuneration. (Pages 44, 78.)

THE PREMIER MILLS' original capital of Rs. 20,00,000 has been reduced to Rs. 2,00,000 and a further capital of Rs. 18,00,000 has been issued. The sum of Rs. 8,00,000 was voluntarily given up by the Agents, Messrs. Currimbhoy Ebrahim & Sons, Ltd., to place the company on a sound financial position. (Pages 44, 166.)

THE GOLD MOHUR MILLS, LTD., were taken into Voluntary Liquidation on 12th July, 1926, and were reformed under the scheme of reconstruction under the same title by Messrs. James Finlay & Co., Ltd., with a capital of Rs. 25,00,000 divided into 25,000 Ordinary Shares of Rs. 100 each. 15,000 shares out of these were issued as fully paid up to the holders of the Second Mortgage Debentures of the old Company. On the remaining 10,000 shares the entire Rs. 100 per share were called up with application. The whole of the new capital had been underwritten without commission by Messrs. James Finlay & Co., Ltd., who are the Managing Agents. (Pages 44, 238.)

THE BOMBAY INDUSTRIAL MILLS CO., LTD., has reduced its capital from Rs. 12,50,000 divided into 25,000 shares of Rs. 50 each to Rs. 6,25,000 divided into 25,000 shares of Rs. 25 each, the reduction being effected by cancelling the capital paid up or credited as paid up which has been lost or is unrepresented by available assets to the extent of Rs. 25 per share upon each of the 10,975 shares which have been issued and are outstanding and by reducing the nominal amount of all the shares in the company's capital from Rs. 50 to Rs. 25 per share. (Pages 40, 228.)

THE KASTOORCHAND MILLS, which include the Imperial Mill, have also undergone a recapitalisation. Since 1924 the company had been suffering losses and the Agents had to forgo even their minimum remuneration. They had themselves advanced large sums and had stood security for other sums and the company owed them nearly Rs. 70 lakhs. It was therefore decided to reduce the capital from Rs. 48,00,000 to Rs. 4,80,000 by writing down 500-rupee shares to 50-rupee shares, and further shares of the same denomination have been issued to the value of Rs. 65,20,000 and allotted to the Agents in payment of the loans advanced by them. The shareholders had the option of buying the shares from the Agents at par within six months from the date of issue. (Pages 42, 174.)

THE E. D. SASSOON UNITED MILLS, LTD., will reduce its capital (subject to the sanction of the Court) by cancelling the Rs. 4 crores worth of ordinary shares. Of the Rs. 6 crores of paid-up capital (Rs. 10 per share) preference shares of Rs. 2 crores have been converted into ordinary shares of Re. 1 value and the Rs. 4 crores of ordinary shares have been reduced to Rs. 40 lakhs of deferred shares of Re. 1 per share. The preference shareholders waive their claim to accumulated arrears of dividends in exchange for Rs. 10 lakhs worth of deferred shares. Thus out of the Rs. 6 crores of issued, subscribed and paid-up capital Rs. 3½ crores have been written off, the whole concern being now capitalised at Rs. 2½ crores. (Pages 40, 189.)

STATEMENT BY SIR VICTOR SASSOON, BARONET.

In this connection Sir Victor Sassoon made a statement regarding the promotion of the E. D. Sassoon United Mills, Ltd., before the general meeting of the shareholders. With regard to the attack on the original promoters of the company, Sir Victor recalled the days of the boom when the company was floated. He was personally quite new to Bombay having arrived from England only six weeks previously and was rather nervous about such enterprises. The properties were valued at Rs. 3 crores as a mere matter of family concern, as the private company consisted of his father and two uncles who for family reasons converted a proprietary concern into a limited company. The property was taken over by a syndicate consisting of shrewd business men like the late Sir Sassoon David, Baronet, and the price was raised to Rs. 6 crores by actual bidding in competition with Sir Hukumchand and others. The 7½ per cent. cumulative preference shares were taken by the original company in terms of the agreement that they should accept them in part payment as everybody in those days wanted to pocket large profits in excess of the 7½ per cent. The promoters took up, over and above this, Rs. 1 crore of ordinary shares for themselves and their friends, so that in common with the rest of the shareholders they had to-day lost nine-tenths of that large sum. Sir Victor also recalled the time when the promoters were besieged in their offices and in their homes by people for the shares. Everybody believed that the boom was going to last and to-day they were all wiser.

Bombay Cotton Mills: Profit and Loss for 1925 and 1926.

Ref. Page	Mills	1925. Profit.	1925. Loss.	1926. Profit.	1926. Loss.
		Rs.	Rs.	Rs.	Rs.
148	Alliance	....	2,12,000	....	....
206	Apollo	....	3,57,540	....	2,11,700
110	Assur Veerjee ..	....	....	....	6,87,200
85	Bombay Dyeing ..	12,61,330	....	11,82,520	....
106	Bombay Cotton ..	....	22,050	....	4,51,000
228	Bombay Industrial ..	....	2,83,900	....	2,47,200
180	Bradbury	35,040	....	....	1,31,600
220	Colaba Land ..	14,800	....	....	6,500
92	Coorla	2,41,200	....	1,60,000	....
88	Century	....	1,03,300	6,01,800	....
72	Crescent	2,29,360	....	....	66,600
236	Crown	48,820	....	4,95,930	....
158	Currimbhoy ..	....	2,12,700	....	3,07,300
202	David	....	1,33,600	....	4,17,200
186	Dawn	2,05,900	....	2,08,700	....
194	Ebrahim Pabaney ..	2,43,920	....	....	3,000
189	E. D. Sassoon United	....	2,91,400	....	7,88,000
198	Edward Sassoon ..	[illegible]	1,92,[illegible]	....	1,64,500
208	Elphinstone ..	93,250	[illegible]	....	54,000
102	Emperor Edward ..	[illegible]	7,83,400	....	....
162	Fazulbhoy	4,01,820	....	4,41,000	....
234	Finlay	....	....	2,92,670	....
100	Fram[illegible] ..	....	1,39,400	72,200	....
[illegible]	[illegible]	....	....	....	1,25,240
[illegible]	Hindoostan	4,02,820	....	4,68,600	....
[illegible]2	Indian Mfg. ..	3,47,850	....	3,16,000	....
[illegible]4	Jamshed	....	....	....	1,25,900
[illegible]4	Kastoorchand ..	....	48,930	....	11,08,000
[illegible]	Khatau Makanji ..	....	....	....	7,15,400
[illegible]50	Kilachand	....	....	....	3,03,700
[illegible]30	Kohinoor	....	....	....	....
[illegible]40	Madhowji Dharamsey	....	....	....	7,82,260
[illegible]78	Madhorao Scindia ..	....	4,30,760	....	3,54,000
[illegible]97	Manekji Petit ..	....	17,08,000	....	9,68,800
[illegible]76	Mathradas	....	6,45,000	....	6,23,100
[illegible]00	Meyer Sassoon ..	....	54,000	....	11,000
[illegible]22	Morarji Goculdas ..	5,67,800	....	61,900	....
[illegible]00	Moon	....	....	50,600	....
[illegible]10	New City of Bombay	....	3,35,800	....	1,96,400
224	New Great Eastern	10,200	....	1,09,600	....
134	New Kaiser-i-Hind	2,73,500	....	1,25,700	....
[illegible]70	Pearl	2,49,070	....	1,52,000	....
[illegible]20	Phœnix	....	41,300	1,08,400	....
166	Premier	....	2,93,800	....	....
146	Presidency	....	....	....	59,800
210	Sassoon	....	4,23,000	....	....
144	Sir Shapurji Broacha	....	10,64,000	....	17,65,000
240	Simplex	1,28,590	....	....	2,29,500
78	Standard	44,600	....	....	....
75	Swadeshi	7,62,200	....	7,30,000	....
236	Swan	....	....	67,300	....
80	Tata Mills	....	12,88,000	....	....
214	Union	....	4,36,300	....	....
128	Western India ..	2,68,830	....	2,38,200	....

(For figures for 1920 to 1924 refer to the pages in first column and for 1927 *see* page 2.)

Cotton Textile Industry Enquiry.

Indian Tariff Board's Report and Government of India's Decisions.

THE Textile Tariff Board which was appointed by the Government of India in July 1926 (*vide* page 586) submitted their Report in January 1927 and it was published on June 7th, 1927, together with a Government Resolution.

As this Resolution rejected the Tariff Board's recommendations for protection, a Conference of millowners from all parts of India was held at Bombay on June 20th, 1927. The mills from the United Provinces and Indore sent messages of support. The mills represented at the Conference were 78 from Bombay, 49 from Ahmedabad, 5 from Sholapur, 2 from Khandesh, 1 from Nadiad, 1 from Cambay, 1 from Broach, 1 from Belgaum, 11 from Baroda, 1 from Kolhapur, 6 from the Central Provinces, 1 from Berar, 4 from Indore, 1 from Bengal, 2 from Delhi, 3 from the Nizam's Dominions, 1 from Mysore, and 12 from the Madras Presidency. The following resolution among others was passed unanimously :—

"This Conference of Representatives of Cotton Spinning and Weaving Mills from every part of India, while recognising the patient and conscientious way in which the [illegible] their enquiry, expresses its disappointment at the meagre character of their recommendations which fail to take into sufficient account the various difficulties and disabilities from which the industry has been suffering, and which called for a more adequate measure of protection than the Tariff Board have thought fit to recommend. This Conference considers that the true economic interests of the country have been sacrificed and the welfare of the Cotton Textile Industry and those dependent on it has been seriously jeopardised by the unjust decisions of the Government of India which entirely fail to protect the industry against unfair competition. This Conference maintains that the reasons advanced by Government for withholding protection are absolutely untenable and strongly urges upon Government the desirability of an immediate reconsideration of their decisions and the grant of adequate protection to the textile industry of the country."

The above Resolution together with a Representation was forwarded to the Government of India, and a deputation from the Indian Millowners discussed the subject with H. E. the Viceroy at Simla on July 12th, 1927. The Millowners' representations were under consideration while the final pages of this publication were passing through the press.

Government of India's Resolution and Decisions.

The Resolution of the Government of India on the Tariff Board Report is published on pages 690 and 691 together with the summary of the Board's findings.

Decisions of the Government of India.

The Government of India are unable to accept the recommendation of the majority of the Board that the spinning of the higher counts of yarn should be stimulated by the grant of a bounty. They are satisfied that the administrative difficulties in working a scheme of the kind proposed are insuperable, and they agree with the view expressed by the President of the Board (Mr. Noyce) that a long established industry, such as the cotton textile industry in Bombay, should need no stimulus at the cost of the general taxpayer, if such a development is in its own interest. As regards the proposal that Government should contribute towards the cost of establishing combined bleaching, dyeing and printing works in Bombay, the Government of India are unable to express any opinion until they have ascertained the views of the Local Government and of the cotton mill industry in Bombay and elsewhere.

The rejection of the proposed bounty on the spinning of the finer counts removes the ncipal reason advanced by the majority of the Tariff Board for a general increase in the im- t duty on cotton piecegoods. The Government of India are also satisfied that, on the facts found by the Board, no case has been established for a general increase in the duty as a measure protection.

Government of India accept the finding of the Board that the advantage to Japan from labour conditions in that country, until the amended Factory Law comes into lation, in actual cost of manufacture may be assessed at about 4 per cent. on both yarn cloth. In making this calculation, the Board has allowed for the fact that double shifts universal in spinning mills in Japan, but not in weaving mills, in which the average hours rked are only 14.45 hours. But the majority of the Board omitted to make a corresponding owance, when calculating the advantage if a reasonable return on capital is included. Hence e advantage to Japan, when calculated on this basis, should be 10 per cent. on cloth and not per cent. as stated by the majority of the Board. It follows that the advantage to Japan, ven if a reasonable return on capital is included, is already sufficiently covered by the existing venue duty of 11 per cent. on cotton piecegoods. No additional duty on this account can erefore, be justified. The existing revenue duty on yarn is only 5 per cent. and in this case the calculation of the majority is accepted, the advantage to the Japanese mills is not fully But an additional duty on yarn only would affect prejudicially the handloom industry r this reason should not be imposed.

The removal of the import duty on machinery and on the materials of industry was mended by the Fiscal Commission and is in accordance with the principle of the resolution ed by the Legislative Assembly on the 16th February, 1923, that the fiscal policy of the nment of India ... y legitimately be directed towards fostering the development of indus- n India. In giving effect to this principle, as revenue considerations permit, the Govern- of India are prepared to give precedence to articles used chiefly by industries which are ng through a period of depression. But they would be unwilling to differentiate between stry and industry by allowing one industry to import free of duty articles on which other stries have to pay duty. The Government of India have decided, therefore, to deal on e lines with the recommendation of the Board that the import duty on cotton textile machi- y and mill stores should be remitted for a period of three years.

The Government of India will introduce legislation at the next session of the Indian slature, to remove altogether, with effect from the 1st October, 1927, the duties on the wing articles :—

A. Machinery and component parts of machinery as defined in items Nos. 51, 51A and of the Import Tariff Schedule (Schedule II to the Indian Tariff Act, 1894) ; aniline and ali- e dyes ; bleaching powder and paste ; farina ; china clay ; sago flour ; magnesium chloride ; n ; tallow ; and cotton ropes.

It is estimated that the consequent loss of customs revenue will be Rs. 45 lakhs in 1927-28 Rs. 85 lakhs in a full year. The removal of the duty on machinery is subject to the proviso it may be necessary to reimpose an import duty on particular kinds of machinery, if it ars, on a report by the Tariff Board, that it is desirable to encourage the manufacture in of such machinery and that a protective duty is required for that purpose, or that the tion of a duty is necessary in order to secure equality of tariff treatment and remove a ap under which the manufacture of such machinery in India would otherwise suffer.

remaining recommendations of the Board, in so far as they concern the Government re under consideration.

The Bombay Cotton Mills: History and Progress.

The Pioneer Spinning Factory in India.

THE idea of starting a cotton spinning factory in Bombay originated in 1851 with an enterprising Parsi merchant, Mr. Cawosji Nanabhoy Daver. There is no official record or authentic information regarding any previous undertaking of the kind in any other part of the country. Thus the absence of any data on the subject and the scarcity of labour and other difficulties rendered Mr. Daver's project exceptionally risky if not unworkable. He, however, persevered with his preliminary enquiries and corresponded with Messrs. Platt Brothers & Co., Ltd., of Oldham, who supported the idea and offered advice and suggestions regarding the machinery required for spinning Indian cotton. Plans and estimates were submitted for a mill of 20,000 spindles and a Company was formed under the title of the Bombay Spinning and Weaving Company and the pioneer spinning factory was inaugurated on Friday, February 22nd, 1854. Thus the enterprising spirit and foresight of a Parsi merchant and the co-operation of British machinery manufacturers laid the foundation of India's industrial development and commercial prosperity.

Addition of Factories : The Oriental Mill.

THE BOMBAY SPINNING MILL was erected at Tardeo and proved a great success and Mr. Daver followed it up by building another mill in close proximity to the parent factory. This second venture, which was known as THE BOMBAY THROSTLE MILL, was equally successful and induced Mr. Manekji Framji Petit to project THE ORIENTAL MILL in 1858 with 30,000 spindles and other machinery by Messrs. Platt Brothers of Oldham, Messrs. Hetherington & Sons and Messrs. Sharp and Roberts of Manchester. This third undertaking worked so satisfactorily that it was converted into a Joint Stock Company and considerably extended with new machinery including 50,000 spindles and 1,000 looms.

Inauguration of the Agency System in 1860.

The first Board of Directors consisted of Messrs. W. F. Hunter, P. Scovel, Maneckji Petit, Byramji Jeejeebhoy, Elias David Sassoon, Varjivandas Madhowdas and Ardeshir Cursetji Dadi. Mr. Cursetji N. Cama was elected Chairman and Mr. Merwanji Framji Panday was appointed General Manager. The machinery was worked under the supervision of Mr. W. Brown and other Lancashire overlookers who were sent out by the machinery makers. Messrs. Merwanji Framji & Co. were appointed Secretaries, Treasurers and Agents and thus was laid the foundation of the Agency System in cotton mill management in Bombay which has existed up to the present day.

The Maneckji Petit Mill.

The starting of the Oriental Mills in 1858 was followed by T[he] MANECKJI PETIT MILLS which were projected in 1860 with 60,000 spind[les] and 1,000 looms by Sir Dinshaw Maneckji Petit, the First Baronet, wh[ose] name has been intimately associated with the trades and industries of [the] Presidency. This venture also yielded handsome returns and stimulat[ed] further enterprise not only in the Parsi community but among t[he] wealthy section of Bhatia merchants who ventured on mill building wi[th] conspicuous success. Nearly a dozen factories were projected in the Ci[ty] during the next ten years and the industry spread to other parts of t[he] Presidency.

Pioneers of the Mill Industry.

Thus the enterprise of Bombay citizens has brought about the enorm[ous] expansion in the trades and industries of India and general prosperity whi[ch] we witness at the present day. For this the country is indebted to t[he] early pioneers of the industry, among whom we may mention :—

Cawosji Daver, Maneckji Petit, Merwanji Panday, Sir Dinshaw Peti[t] Bart., Nusserwanji Petit, Bomanji Wadia, Dharamsey Punjabhoy, Jamse[tji] Tata, Tapidas Varajdas, Keshowji Naik, Khatau Makanji, Sir Mangald[as] Nathubhai, James Greaves, Sir George Cotton, Morarji Goculdas, Muncho[rji] Banaji, Moolji Jaitha, Thackersey Moolji and others who co-operated wit[h] them.

The Pioneer Factories—1855 to 1870.

Spinning Mills.	Promoters.	Weaving Mills.	Promote[rs]
1854.		**1858.**	
Bombay Spinning.	Cawosji Daver.	Oriental.	M. N. P[anday] M. F. Panday.
1857.		**1860.**	
Bombay Throstle.	,, ,,	Royal.	Kesowji Naik.
1860.		Coorla.	Bomanji H. Wadi[a]
Victoria Mill.	Sir D. M. Petit, Bart.	Bombay United.	Sir Mangaldas Nathubhai.
1863.		Great Eastern.	Merwanji N. Bha[t]nagri and Pallon[ji] Kapadia.
Arkwright.	Pestonji R. Colah.	Maneckji Petit.	Sir D. M. Peti[t] Bart.
1867.		**1869.**	
Albert (Parel).	Cassumbhoy Dharamsey.	Alexandra.	J. N. Tata.
		1870.	
		Morarji.	Morarji Gokuldas.

The number of spindles in the above 13 factories totalled 291,0[00] with 4,100 looms and 8,100 work-people.

The American Civil War of 1861-64 : The Share Mania.

The progress in mill building would have continued at this period but it will be seen that, after the starting of the MANECKJI PETIT MILLS and the VICTORIA MILLS in 1860, there was an interval of nearly 10 years before new mills could be projected. This temporary cessation was brought about in 1861 by the Civil War in America and the abnormal demand for Indian cotton and the fabulous prices it fetched in the British markets. The Lancashire spinners had sympathy with President Lincoln and his cause and preferred Indian cotton to supplies of the raw material from the Southern States. Members of the various communities in Bombay, including wealthy merchants, bankers, brokers and traders invested their all in cotton exports and thought of no other business or commodity in the frenzy of the huge profits which the white staple of the country brought them.

The value of cotton exports in 1860 was estimated at 5¼ millions while the total exports during the five years of the American war came to 80 millions, the actual addition of wealth in Bombay being computed at 75 millions sterling during this period.

Even the existing investments increased considerably in value. The Colaba Pressing Company's shares went up to Rs. 6,000 on the paid-up value of Rs. 2,700; the Colaba Land Company's share of Rs. 10,000 fetched Rs. 90,000. The Bombay Spinning Company could secure a premium of Rs. 1,300 on its shares; the Oriental Mill shares went up to [illegible] 400 premium and the Royal or Fleming Mills were purchased at 200 premium and the Victoria at Rs. 2,500 premium.

The super-abundance of wealth which thus poured into the slender coffers Bombay citizens stimulated wilder enterprises in other directions and rded opportunities to company promoters to put forward various schemes he form of banking and financing associations, press and shipping com-es, land and building undertakings and various other enterprises. These the support of the rich and the middle classes, but the Back Bay lamation project beat every other venture. The paid-up value of each re in this scheme was Rs. 4,000 but the public went crazy over the sion for enormous profits and paid as much as Rs. 25,000 per share.

The nemesis, however, arrived with the surrender of Lee's army and the of the war in 1864 and the Back Bay project brought the most widespread cial ruin and general disaster in the history of the city. The price of Indian n began to fall with appalling rapidity and brought in its trail a heavy in the price of other securities and failure and insolvencies became ral among people who were rolling in wealth only a few years before.

It was, consequently, some time before financial stability and confidence be restored, and by the end of 1870 improved conditions appeared to ail, aided materially by the steady profits in the textile industry. rtant concerns like the ALEXANDRA and the MORARJI GOCULDAS Mills started about this period followed by as many as 15 factories during xt five years.

Mr. J. N. Tata's First Cotton Mill : His Early Services.

It will be interesting to note that THE ALEXANDRA MILL was originally an oil factory known as the Chinchpoogli Oil Mill which was purchased by Mr. Jamsetji Nasserwanji Tata in 1868 and converted into a spinning and weaving mill. This worked satisfactorily and was sold in 1872 to Mr. Kesowji Naik on favourable terms. This was Mr. Tata's first venture in mill building, but he realised the enormous benefit that India would derive by an expansion of the textile industry and after the sale of the Alexandra Mill he sailed for England to study the working of the cotton mills in Lancashire and the machinery required to spin and weave Indian cotton to the best advantage in the varying climatic conditions peculiar to this country. His enquiries in these directions and his investigations and experiments which were broadcasted for the benefit of Indian millowners proved of the highest utility and enabled Mr. Tata to manage his own concerns with a measure of efficiency and integrity which had far-reaching influences on the expansion of the mill industry and the economical working of the factories.

Further Progress—1870 to 1875.

The successful working of the pioneer factories encouraged further mill building in Bombay, and by the end of 1875 we had the following additions :—

Spinning Mills.	Promoters.	Weaving Mills.	Promoters.
1872.		**1874.**	
Jivraj Baloo.	Dwarkadas Vusonji.	Colaba Land Mill.	Remington Co.
Sunderdas.	Moolji Jaitha.	Sassoon.	David Sassoon.
Shamji Jadhowji.	Jadhowji Ragowji.	Colaba Spinning.	Nursey Kesowji.
1873.			
Hindustan.	Thackersey Mooljee.	Khatau.	Khatau Makanji.
1874.		Mandvi.	Hormusji Saki wala, Agent.
National.	Jehangir Mody.		
Nichol.	Ahmedbhai Habibbhai.	Mazagaon.	D. M. Petit & So
		Coorla (New).	Ardeshir H. Wad
Anglo-Indian.	English Company. James Dunckerly, Secretary.	Prince of Wales.	K. Huridas a M. Currimbho

The total up to end of December, 1875, was as under :—

	Mills.	*Spindles.*	*Looms.*	*Hands.*	*Paid-u Capita* Rs.
1855 to 1870 ..	13	291,000	4,100	8,100	....
1870 to 1875 ..	15	461,600	3,680	5,450	3,38,58,
Total in 1875 ..	28	752,600	7,780	13,550	3,38,58,

This was the progress of cotton mill building in Bombay during first twenty years of the existence of the industry.

, GREAVES.
Died 1881.

SIR GEORGE COTTON, KT.
Born 1842. Died 1905.

MR. DAVID SASSOON.
Born 1792. Died 1864.

JI JAITHA.
Died 1889

MR. MORARJI GOCULDAS, C.I.E.
Born 1834. Died 1890.

Progress Between 1875 and 1885.

The progress of the industry during the following ten
particularly rapid, there being 22 additional factories by the
The third group of new mills comprised the spinning factories
Messrs. Greaves, Cotton & Co., which were the first in Bombay to
on the basis of a commission on profits for the Agents, and w
marked success and brought substantial returns for the investor
also during this period that Sir Dinshaw Manekji Petit's firm m
additions to their mills, while Messrs. Thackersey Moolji & Co.
more factories to their existing concerns which constituted th
millowners in the Hindu community.

The new mills projected between 1875 and 1885 included the

Spinning Mills.	Promoters.
1876.	
Nursey Kesowji.	Kesowji Naik.
1882.	
Imperial.	Greaves, Cotton & Co.
1883.	
Empress.	Greaves, Cotton & Co.
James Greaves.	Greaves, Cotton & Co.
Connaught.	Greaves, Cotton & Co.
Leopold.	Greaves, Cotton & Co.
Ripon.	Nanabhoy B. Jeejeebhoy.
City of Bombay.	Muncherji N. Banaji.
Queen.	K. M. Heeramaneck.
Lakhmidas.	Lakhmidas Khimji.
People of India.	James Latimer & Co.
1884.	
Dhun.	Nasserwanji A. Wadia.
Naigaum.	Nasserwanji Katruck.

Spinning Mills.	Promo
1885.	
Jamshed.	Hormusji S.
Bombay Cotton.	Sojpal Hirji.
Blue Mill.	Temulji Dhu
Weaving Mills.	
1880.	
Western India.	T
1883.	
E. D. Sassoon.	E
Essa Callifa.	Essa
Framji Petit.	D. M.
Gordon.	J. Gor
1884.	
Indian Manufacturing.	Thack
1885.	
Presidency.	Ranch ta

With the addition of the above 23 factories and deducting
were closed, the city possessed a total of 49 mills as under in 1885 :—

	Mills.	*Spindles*	*Looms.*	*Hands.*	Rs.
In 1875	28	752,600	7,780	13,550	3,38,5
1875-85	21	594,800	4,230	28,000	1,41,0
Total in 1885 ..	49	1,347,400	12,010	41,550	4,79,6

...IATAU MAKANJI.
...8. Died 1876.

SIR MANGULDAS NATHUBHAI, KT.
Born 1832. Died 1890.

MR. SORABJI SHAPURJI BENGALI, C.I.E.
Born 1831. Died 1893.

...RWANJI MANEKJI PETIT.
...3. Died 1891.

MR. VIRCHAND DIPCHAND
Born 1835. Di...

THE GREAVES COTTON MILLS AT D&LISLE ROAD.
The Empress, The New Empres, Howard & Bullough and The Apoll

Photo : Copyright.

MR. CAWOSJI NANABHOY DAVER.
Born 1814. Died 1873.

MR. MERWANJI FRAMJI PANDAY.
Born 1812. Died 1876.

MR. MANEKJI NUSSERWANJI PETIT.
Born 1802. Died 1859.

ASSUMBHOY DHARAMSEY.
n 1834. Died 1882.

MR. DHARAMSEY POONJABHOY
Born 1816. Died 1888.

See page 5.]

THE SITE OF THE BACK BAY RECLAMATION IN 1863.

[Photo : Bom. Gazetteer.

Progress from 1885 to 1895 : The Advent of Ring Spinning.

Spinning in the Bombay mills had hitherto been done on the mule or fly throstle, the principal suppliers of the machines being Messrs. Platt Bros., John Hetherington & Sons, Dobson and Barlow, Asa Lees & Co. and Taylor, Lang & Co. However, the advent of the Ring Spinning Frame introduced by Mr. Samuel Brooks of Manchester, which was being tested by Mr. J. N. Tata at the Empress Mill at Nagpur, was destined to revolutionise the Bombay mill industry. The news of the success of Mr. Tata's experiments with the new machine induced some of the Bombay millowners to give orders for trial Ring Frames, and one of the earliest sets to be put up was at the Sunderdas Mills under the Agency of Messrs. Moolji Jaitha & Co. The test was conducted on three different makes of frames under the supervision of Mr. M. C. Rutnagur, the manager of the mills. The test proved the superiority of the Ring Frame over the Fly Throstle in every respect and even over the mule in point of production, if not quality in the case of short-stapled cotton. At any rate, the Agents of the Sunderdas Mills decided on replacing the whole of the Fly Throstle Frames by Ring Spinning, and orders were placed accordingly.

The Greaves Cotton Spinning Mills.

Meantime, Messrs. Greaves, Cotton & Co. with commendable enterprise, put up an entire ring spinning mill at DeLisle Road. The success of the factory soon established the popularity of the Ring Frame and the investing public cheerfully supported other Ring Spinning undertakings of this firm. These included the EMPRESS, NEW EMPRESS, CONNAUGHT, HOWARD AND BULLOUGH, IMPERIAL, JAMES GREAVES and LEOPOLD with the huge total of 283,000 ring spindles which brought handsome returns to the shareholders of these popular concerns. It is worth recording that the spinning and preparatory machinery in these factories was wholly supplied by Messrs. Howard and Bullough, Limited, of Accrington, the power-house being fitted with steam engines by Mr. Benjamin Goodfellow and the boilers by Messrs. Tinker Shenton, Hyde.

Further Mill Building : Introduction of the Revolving Flat Card.

It was about this period that the Revolving Flat Card was being perfected to supersede the Roller Card, and these and other innovations introduced in cotton machinery by the Lancashire makers encouraged Bombay millowners to renew their plants while new factories were projected under fresh enterprise and management. Consequently, the third period of ten years—1885 to 1895—in the history of mill building in Bombay, brought in a further addition of 21 factories, making 70 in all with an aggregate of 2,124,000 spindles, 20,220 looms and 75,750 work-people. These new factories included those projected by Messrs. Currimbhoy Ebrahim & Sons, Sassoon J. David & Co. and E. D. Sassoon & Co. which have worked with marked success.

New Mills Started Between 1885 and 1895.

Spinning Mills.	Promoters.
1886.	
Howard & Bullough.	Greaves, Cotton & Co.
1888.	
Bombay National.	Tapidas Varajdas & Co.
David.	Sassoon J. David & Co.
Currimbhoy.	Currimbhoy Ebrahim & Sons.
Star.	K. M. Heeramaneck & Co.
Britannia.	
Wadia.	N. A. Wadia.
Jubilee.	Readymoney Jeejibhoy & Co.
Union Spinning.	Vithaldas Gopaldas & Co.
Union (Dadar).	Lang & Co.
1889.	
Sorab.	H. S. Batlivala.
China.	P. A. Hormarji.
1890.	
Peeroo Mahomed.	Nancey, Spencer & Co.
Sun Mills.	Assur Virji.
Hope.	Rangildas Bhukhandas.
1893.	
Damodar.	Lakhmidas Khimji.
1895.	
New Empress.	Greaves, Cotton & Co.

Weaving Mills.	Promoters.
1889.	
Lord Reay.	N. R. Khote.
1890.	
Baladina.	H. Baladina & Co.
Indo-China.	Allana Munji.
1895.	
Jacob Sassoon.	Sir Jacob Sassoon, Bart.

The addition of these 21 factories brought the total to 70 mills in 1895 as under :—

	Mills.	*Spindles.*	*Looms.*	*Hands.*	*Paid-up Capital.* Rs.
In 1885	49	1,347,400	12,010	41,550	4,79,62,000
1885-95	21	776,600	8,210	34,200	75,84,000
Total in 1895 ..	70	2,124,000	20,220	75,750	5,55,46,000

Slow Progress Between 1895 and 1905 : Plague and Famine.

The progress of new cotton mills in Bombay after 1895 was retarded by plague and famine and severe financial depression, the 16 factories which were started between 1895 and 1905 including at least a dozen which had been projected before 1896. It was during this period that concerns which were not managed economically and efficiently had to undergo a change of Agency or liquidation, as has been described under the heading of "Fate of the Factories" on page 25. Better times however came in 1903 and profits could be earned by most of the mills.

New Mills Between 1895 and 1905.

Spinning Mills.	Promoters.
1896.	
Gold Mohor.	Captain Sett & Co.
Globe.	Sorabji Shapurji & Co.
Naranji.	Naranji Dwarkadas.
Diamond.	H. N. Wadia.
Moon.	P. A. Hormarji.
1898.	
New David.	Sassoon J. David & Co.
Tricumdas.	Tricumdas Dwarkadas.
1905.	
Matunga.	Dayaram J. Master.

Weaving Mills.	Promoters.
1896.	
Textile.	Nowrosji Wadia & Sons.
Pabani.	Currimbhoy Ebrahim & Sons, Ltd.
Kohinoor.	Killick, Nixon & Co.
Assur Virji.	Assur Virji.
1897.	
Tapidas.	Dayabhoy Tapidas.
1898.	
Century.	Nowrosji Wadia & Sons.
1899.	
Mahomed-bhoy.	Currimbhoy Ebrahim & Sons, Ltd.
1905.	
Fazulbhoy.	,, ,,

Thus the position of the industry at the end of 1905 was as under :—

Years.	*Mills.*	*Spindles.*	*Looms.*	*Hands.*	*Paid-up Capital.* Rs.
In 1895	70	2,124,000	20,220	75,750	5,55,46,000
In 1895-1905	16	437,000	7,880	17,250	54,89,000
Total 1905 ..	86	2,561,000	28,100	93,000	6,10,35,000
Less closed	—4				
	82				

Japanese Competition : Slow Progress Between 1905 and 1915.

The effects of plague and famine were not so severe after 1905, but past experience deterred investors from launching indiscriminately into new ventures in cotton mill building between 1905 and 1915. Japan, which had commenced building her own mills from 1900, now began competing with Indian yarn in the Chinese markets, which materially affected the earnings of the spinning factories in Bombay, and it was deemed advisable to utilise the reserves and all available capital for increasing the resources of existing concerns by weaving and finishing machinery. Thus only eight mills were added between 1905 and 1915 and fitted with looms in every case, as under :—

New Mills Between 1905 and 1915.

Weaving Mills.	Promoters.
1906.	
Finlay.	James Finlay & Co.
Pioneer.	W. B. Soman.
1908.	
Spring.	Nowrosji Wadia & Sons.
1913.	
Pearl.	Currimbhoy Ebrahim & Sons, Ltd.
1914.	
Kastoorchand.	Kastoorchand Mathradas & Co.
1915.	
Zenith.	C. N. Wadia.
Simplex.	D. M. Wadia.
Tata.	Tata Sons, Ltd.

With the addition of the above 8 factories the progress was as under :—

Years.	*Mills.*	*Spindles.*	*Looms.*	*Hands.*	*Paid-up Capital.* Rs.
In 1905	82	2,561,000	28,100	93,000	6,10,35,000
In 1915	8	433,400	23,800	19,000	1,55,63,000
	90	2,994,400	51,900	112,000	7,65,98,000
Less closed ..	—4				
	86				

Extensions Between 1915 and 1925.

The outbreak of the great War in 1914 and the stoppage of machinery shipments from Lancashire to India brought on a complete cessation in mill building in Bombay for several years, and even after peace was declared the heavy increase in the cost of land and building prevented the erection of new factories. We have consequently to record the addition of only one mill in Bombay within the last ten years, *viz.*, THE PREMIER MILLS projected by Messrs. Currimbhoy Ebrahim & Sons, Ltd. At the same time large extensions to existing plants were made during this period which accounts for the heavy increase in the number of spindles and looms between 1915 and 1925.

The very substantial increase in the Paid-up Capital for this period is due to the conversion of private concerns into Joint Stock Companies and to the transfer of existing factories at enhanced capital cost during the boom period of 1920-22.

New Mill Between 1915 and 1925.

Mill.	Promoters.
1921.	
Premier.	Currimbhoy Ebrahim & Sons, Ltd.

Progress Between 1915 and 1925.

Years.	*Mills.*	*Spindles.*	*Looms.*	*Hands.*	*Paid-up Capital.* Rs.
In 1915	86	2,994,400	51,900	112,000	7,65,98,000
In 1915-25	1	433,600	10,200	36,000	12,74,55,650
	87	3,428,000	71,100	148,000	20,40,53,650
Less closed ..	—5				
	82				

The Position in 1925.

We have reviewed the progress of the mill industry in Bombay from 1855, when the first factory was started, to 1925, a period of seventy years during which 97 factories were erected. Several of these have, however, been destroyed by fire and closed whilst in others the machinery was removed and sold, leaving at the present day 82 spinning and weaving mills in the Town and Island of Bombay including Coorla.

Summary of Mill Building in Bombay 1855 to 1925.

The following summary shows the progress during periods of Ten Years.

Year.	*Mills.*	*Spindles.*	*Looms.*	*Hands.*
1855	1	20,000	....	400
1855-70	12	271,000	4,100	7,700
1870-75	15	461,600	3,680	5,450
1875-85	23	594,800	4,230	28,000
1885-95	21	776,600	8,210	34,200
1895-1905	16	437,000	7,880	17,250
1905-15	8	433,400	23,800	19,000
1915-25	1	433,600	19,200	36,000
	97	3,428,000	71,100	148,000
Less closed	—15			
	82			

Increase in Machinery.

It will be noticed from the above summary that while only 8 additional factories were erected in Bombay between 1905 and 1915 the number of new spindles amounted to 433,400 or nearly equal to the number contained in the 16 factories erected in the previous ten years ended 1905. The number of new looms between 1895 and 1905 amounted only to 7,880 whereas in the following ten years as many as 23,800 looms were added.

Extensions in Existing Mills.

Other noteworthy features have been the large extensions made in existing factories during 1915-25. Thus while only the Premier Mill was erected during this period, the additional spindles of this mill and the additions in existing mills amounted to a total of 433,600 while the looms totalled 19,200. The enormous increase in the weaving machinery can be judged from the number of additional looms as under :—

Number of Looms from 1855 to 1905 or during the first 50 years	..	28,100
Number of Looms from 1905 to 1925 or during the last 20 years	..	43,000
Total Looms in Bombay Mills in 1925	..	71,100

Improvements in Machinery and Processes.

Japanese competition and other trade conditions compelled Bombay millowners to look out for new markets and spin higher counts and weave a greater variety of cloth and otherwise improve their production by bleaching, finishing and dyeing. Thus while the additional mills between 1905 and 1925 numbered only 9 they have been replete with the most up-to-date improvements and include the well-known concerns under the agency of Messrs. Nowrosji Wadia & Sons, W. H. Brady & Co., Ltd., Currimbhoy Ebrahim & Sons, Ltd., James Finlay & Co., Ltd., and Tata Sons, Ltd.

The old concerns which were working under a disadvantage for want of weaving and other machinery were also renovated with looms and finishing plants and other modern improvements and processes. Almost all the factories now working in the city are provided with looms, and from the particulars of the machinery with which each mill is furnished as described in subsequent pages it will be seen that the Bombay Cotton Mills are in no way inferior to the Lancashire textile factories in their general equipment and manufacturing resources.

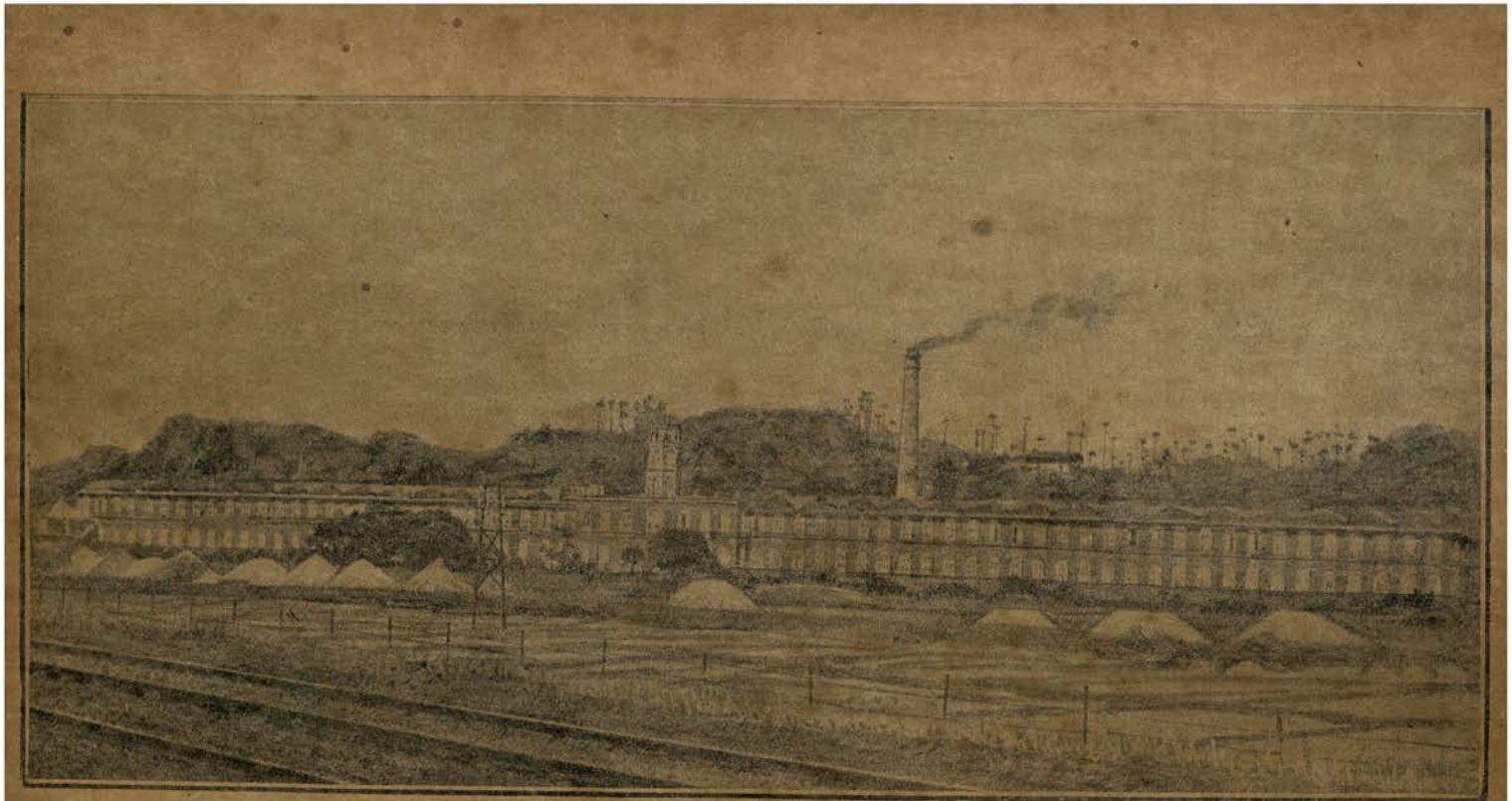
The Fate of the Factories.

We have reviewed the building up of the cotton mill industry in Bombay from the first factory in 1855 to the present day when the total stands at 82. There should have, however, been 97 cotton mills in the city but several have been destroyed by fire or closed and dismantled. With few exceptions, the pioneer undertakings turned out successful, as also most of the mills that were projected prior to 1890. However, the plague of 1896-98 and the famine which followed brought on difficulties especially in the case of concerns which had not been managed with efficiency and economy. The Japanese competition in the Chinese markets also affected the profits in latter years and the dividends dwindled down to nothing. The situation was aggravated by mismanagement and even corruption and the protests from shareholders and the financial difficulties of the Agents brought on the winding up and reconstruction of several concerns. It will therefore be instructive to look into the fate of the factories that have failed and the position of those that have survived.

The Bombay Spinning Mill worked profitably under Mr. Cawosji Daver and till his death in 1873 when it was sold to Mr. Shivlal Motilal, a wealthy Marwari merchant, and continued working till destroyed by fire in 1887. It was, however, rebuilt and fitted with new machinery and is now known as Raja Bahadur Motilal Pitty Mills. This was the pioneer cotton spinning factory of its kind in India and it is worth recording that the Prospectus of the Company was issued on a Friday in 1851, the foundation was laid on a Friday in 1852, the mill commenced working on Friday, February 5th, 1854, and it was on Friday, May 6th, 1887, that it was burnt down and closed.

The Bombay Throstle Mill, which was the second venture of Mr. Daver, was worked by him for a few years and then handed over to Mr. Tapidas Varajdas who converted it into the Alliance Mills of the present day.

The Oriental Mills at Tardeo worked profitably for many years with a subsidiary factory at Colaba, but came to grief in 1898 due to mismanagement and neglect which followed the death of the principal members of the Agents' firm. The newly appointed successors could not realise the gravity of the situation till the protests of the shareholders and press criticism disclosed irregularities and negligence on the part of the officials and staff. The concern was wound up and sold in 1903 to Sir Adamji Peerbhoy but subsequently the plant and premises were dismantled and the grass is once more growing on the site of one of the most prosperous of the pioneer factories in British India.

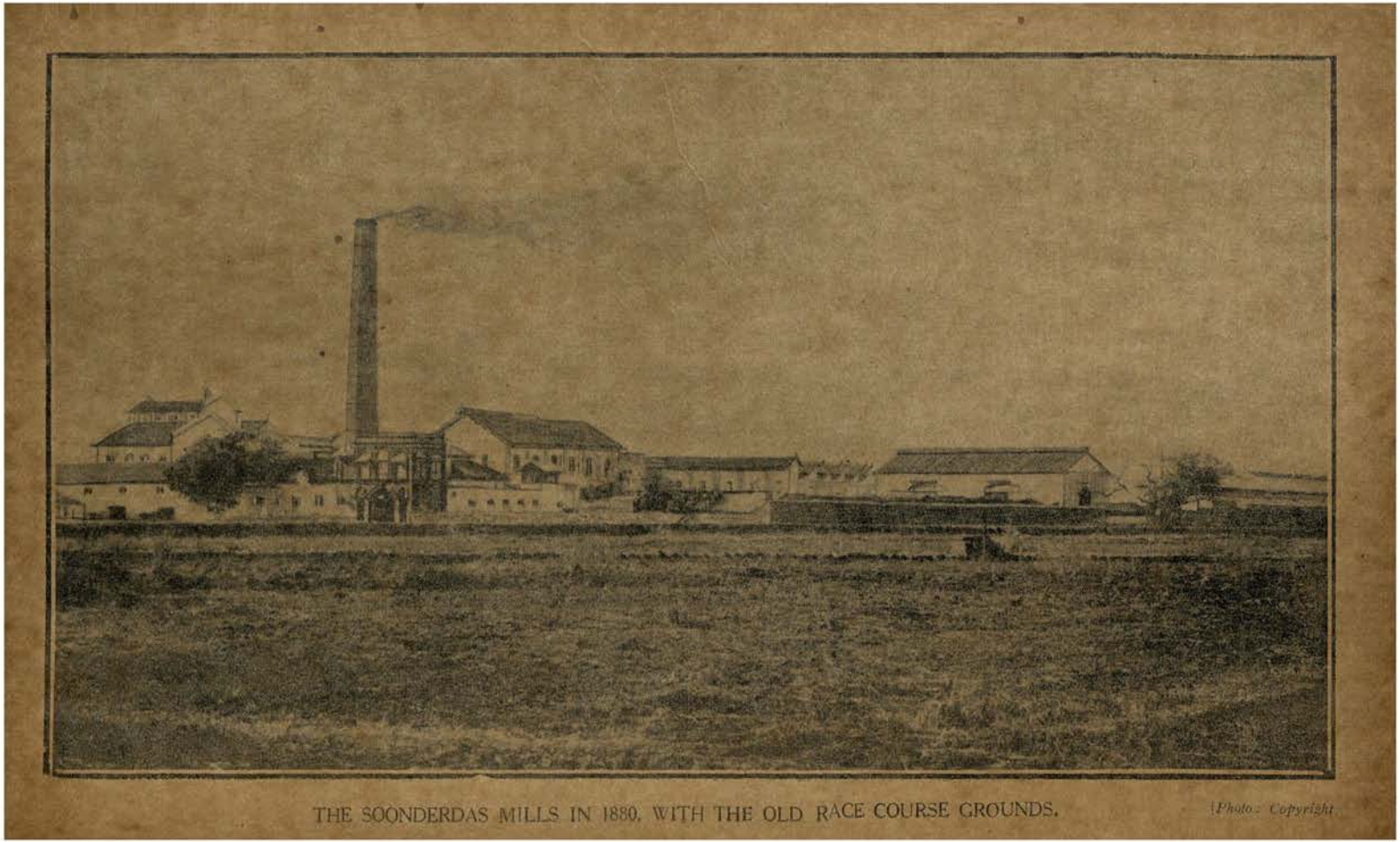


THE DHARAMSEY POONJABHAI MILLS AT COORLA, BOMBAY, IN 1865.
(NOW THE SWADESHI MILLS.)

[Photo Copyright.

THE COORLA MILLS, originally projected by Mr. Bomanji H. Wadia in 1860, did not show good results on account of the distance from Bombay and the scarcity of labour and materials. It was taken over by Mr. Dharamsey Poonjabhoy in 1865 and reconstructed under the title of the Dharamsey Punjabhoy Mills. The new agent sent his son Mr. Cassumbhoy Dharamsey to England in 1872 to bring additional machinery and the young man selected a dozen different makers in Lancashire, so that by 1873 the mills had been fitted with 90,000 spindles and 1,000 looms which were driven by five pairs of steam engines and a battery of 22 boilers with a large variety of workshop tools and appliances. Despite qualified fitters and managers from the Manchester and Oldham districts, the New Dharamsey Mills did not show sufficient profits, and in 1874 the Agency was transferred to Mr. Merwanji Framji Panday who had been singularly successful with the Oriental Mills at Tardeo. Mr. Panday improved the working and the mill brought in sufficient profits within the next year to pay off the debt of the old Agency. It was, however, a hard struggle for Mr. Panday and the strain and anxiety of reviving an unwieldy concern full of complications brought on prostration from which he did not recover. Thus Mr. Panday's death in 1876 necessitated further changes, and after various attempts at improvements the Company had to be wound up in 1886 for the fourth time during its existence of 20 years. Mr. Jamsetji Tata then came on the scene and purchased the whole concern in 1887 from the Liquidator for Rs. 12 lacs and restarted it under the name of the Swadeshi Mills Co., Ltd. It was, however, no easy task to work a huge factory built and fitted irregularly and unmethodically with diverse makes and sizes of machinery. It was therefore not till 1890 that Mr. Tata's organising powers and resources turned over a new leaf in the history of the largest spinning and weaving factory in India and the Swadeshi Mills began to improve and now ranks amongst the most successful of Joint Stock Companies in this Presidency.

The IMPERIAL MILL was originally projected by Mr. Ralph Hyde Cheetham of Manchester, but failed before completion and was taken over by Messrs. Greaves, Cotton & Co. in 1882. The EMPRESS MILL was started by the latter firm in 1878 as a mule spinning factory and yielded handsome returns from the reserves of which the NEW EMPRESS was almost wholly financed and started in 1895. The JAMES GREAVES MILL commenced work in 1883 with mule spindles by Messrs. Taylor Lang & Co. and the preparatory machinery by Messrs. Howard and Bullough and was afterwards converted into a ring spinning factory. The CONNAUGHT MILL was floated to demonstrate on a commercial scale the improvement in the Rabbeth Spindle. These four factories gave satisfactory returns to the investors as purely spinning mills till the acute depression in the yarn trade with China, and were transferred in 1915 to the Sir Shapurji Bharocha Mills Ltd. and fitted with sizing and weaving machinery, the James Greaves Mill being converted into the INDIAN WOOLLEN MILLS in 1921.



THE SOONDERDAS MILLS IN 1880, WITH THE OLD RACE COURSE GROUNDS.

[Photo: Copyright

THE NATIONAL MILL, which was started by Messrs. Nusserwanji Petit & Co., went into liquidation in 1895; it was purchased by Mr. Vijbhukhandas Atmaram in 1896 and called the Saraswati Mills. It again stopped working in 1910 and was taken over by Messrs. Forbes, Forbes, Campbell & Co. who closed the concern and sold off the machinery in 1913.

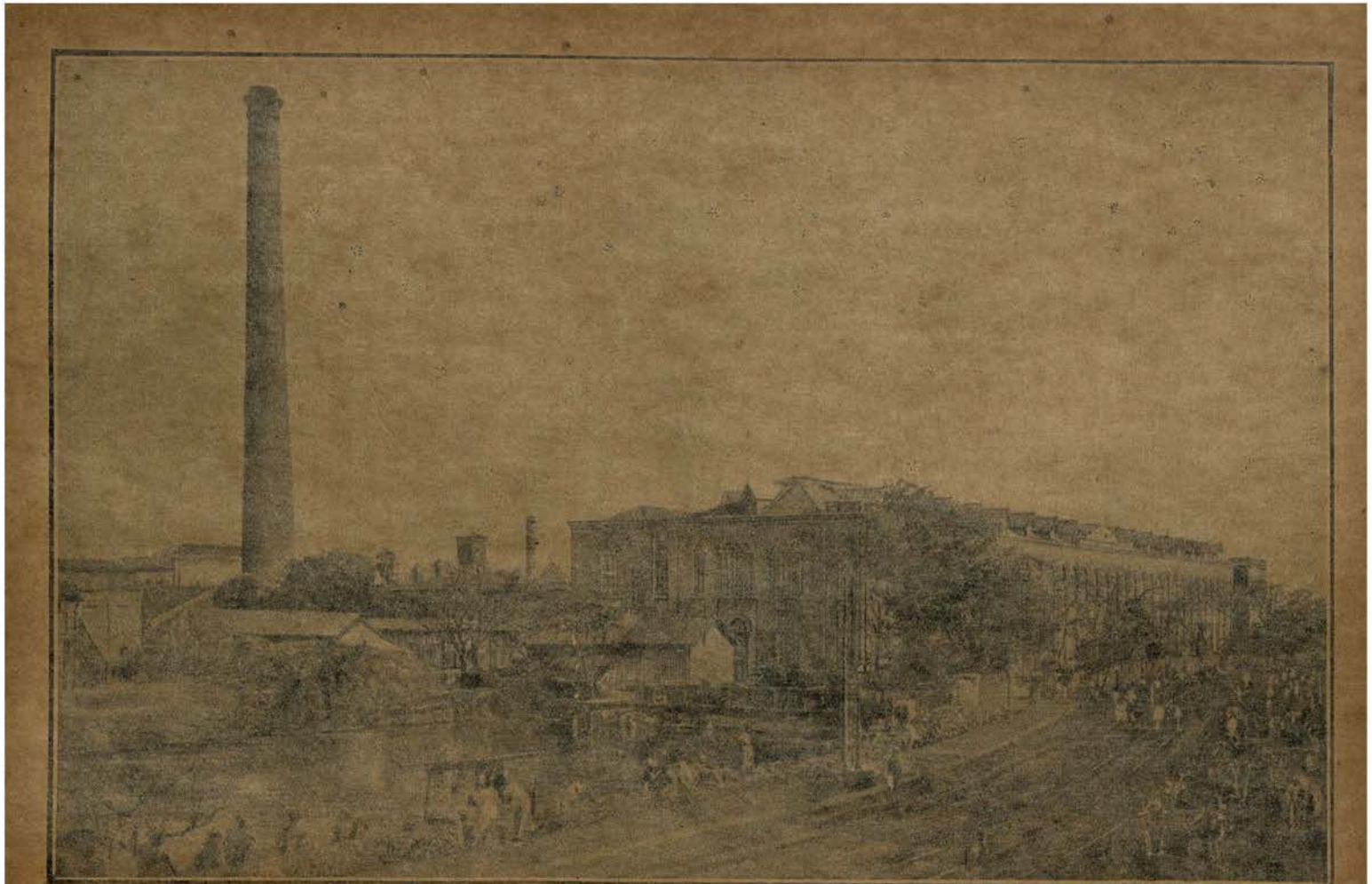
THE VICTORIA MILL was one of the earliest to be started by Messrs. D. M. Petit and Sons. It was wound up in 1898 and bought by Messrs. C. and F. D. Petit in 1899. It again went into liquidation and was purchased by Messrs. H. M. Mehta and Mangaldas Girdhardas in 1905. The mills brought handsome returns to the new owners, who converted it into a limited liability concern in 1913.

THE HOWARD & BULLOUGH, one of the most prosperous of the Greaves Cotton mills, was projected to demonstrate on a large scale, the Electric Stop motion on drawing frames which has proved so successful. The mill suffered along with other spinning concerns in 1915 owing to the depression in the China market and was purchased by Messrs. Greaves, Cotton & Co. in 1917. The machinery was sold at a high price in 1921 and the building was purchased by Messrs. E. D. Sassoon & Co. in 1925 and is now converted into a weaving shed as part of the Apollo Mills.

THE ALBERT, one of the pioneer concerns, was renovated in 1876 but went into liquidation in 1879. Mr. Premchand Roychand then took it over and named it the Parel Mills in 1883. It again changed hands in 1886 and became the Ookerda Khetsey Mills. In 1895 it was purchased by Mr. Cawasji Lantine and called the Wahalan Mills but was subsequently closed and became the New Islam in 1903. It has recently changed hands, the present lessee being Mr. Mafatlal Gagalbhai, Agent of the New China Mills.

THE SOONDERDAS MILL was one of the earliest to be fitted, in 1885, with Ring Spinning Frames, Ring Doubling, Ball Winding, the Revolving Flat Cards and other improvements which were introduced by the Lancashire mills at that period, including the automatic Sprinklers. A plant for making Healds and Reeds was also started in the mill, being the first of its kind in India. The Soonderdas worked profitably until 1906 when a large portion of the machinery was destroyed by fire and it was eventually dismantled and closed in 1911.

THE LUKHMIDAS, THE TRIKAMDAS and THE BOMBAY COTTON Mills which were managed by Messrs. Lukhmidas Khimji and Dwarkadas Dharamsey had to face sensational disclosure in 1909 when heavy defalcations were brought to light. Dwarkadas Dharamsey admitted his reckless speculations and committed suicide in August, 1909. The three concerns were wound



THE OLD ROYAL OR FLEMING MILLS, 1875. NOW THE DINSHAW PETIT MILLS. [*Photo Copyright.*

up, the Lukhmidas Mills being taken over by Messrs. Sassoon J. David & Co., and the Tricumdas by Messrs. E. D. Sassoon & Co. The former is now known as the DAWN MILLS and the latter as the EDWARD SASSOON MILLS. The Bombay Cotton Mills are now being worked by Messrs. H. F. Commissariat & Co.

THE ALEXANDRA MILLS, which was started by Mr. Jamsetji Tata in 1868, was purchased by Mr. Kesowji Naik in 1872 at a handsome price and worked profitably with extended machinery including weaving. This encouraged Mr. Kesowji to build THE NURSEY MILLS at a short distance from the Alexandra. Both concerns worked well till about the year 1878 when defalcations were discovered in the office of the Agent's firm, and Nursey Kesowji was tried and sentenced to rigorous imprisonment. The Alexandra and the Nursey Mills had to be closed and the former was purchased by Mr. Ellias Sassoon in 1880 and has been working satisfactorily, being recently merged into the group of the E. D. Sassoon United Mills, Ltd. The Nursey Mill was purchased in the same year by Mr. Varjivandas Madhowdas and others and has since been known as the New Kaiser-i-Hind Mill. THE ROYAL or FLEMING MILL, also owned by Mr. Kesowji Naik, was taken over by Sir Dinshaw Petit in 1879 and converted into the Dinshaw Petit Mills of the present day.

THE QUEEN, BRITANNIA and STAR Mills which were projected by Mr. K. M. Hiramaneck under the support of Parsi investors came to grief during the various crises in the mill industry and the concerns were wound up at different times and reconstructed under different names. The Queen Mills stopped working in 1910 and became " King George " in 1913 under the ownership of Mr. Ahmedbhoy Habibbhoy. In 1917, it again changed hands, and became the MATHRADAS MILLS, under which name it was transferred to Messrs. Currimbhoy Ebrahim & Sons in 1922. The Star Mills agency was transferred to Messrs. Vishram Ebrahim & Co. in 1894. It, however, went into liquidation in 1904 and was purchased by Mr. Ahmedbhoy Habibbhoy who worked it as the VICTORY MILLS till it was burnt down by fire in 1906. It was, however, reconstructed in 1917 as the PLANET MILL of the present day. The Britannia Mills was taken over by Messrs. Khatau Makanji and Sons in 1893 and was transferred to Messrs. Tullockchand and Shapurji in 1905, who restarted it as the PHOENIX MILLS. The concern was again transferred in 1919 to Messrs. Ramnarain Hurnandrai and Sons who are now the Agents.

The LEOPOLD MILL was started in 1882 by Messrs. Greaves, Cotton & Co. as a cotton waste spinning factory, the first of its kind in India. It worked very successfully till Germany began to pay higher prices for waste from Indian cotton mills and the Leopold, being unable to compete, was

converted into an ordinary spinning mill. The change yielded satisfactory results, but the land and building were acquired for the B.B. & C.I. Railway extensions in 1909 and the machinery had to be dismantled and sold.

The ANGLO-INDIAN MILL was projected in 1876 by an English Company having offices in Manchester under a Secretary and a Manager for Bombay, *viz.*, Mr. James Dunkerley, father of Mr. Herbert Dunkerley. This first experiment of an English Company owning a mill in India did not prove successful and in 1893 the concern was mortgaged to Sir George Cotton, Messrs. Bejonji Capadia, Vijbhukhandas Atmaram and Cursondas Valubhdas. Messrs. Greaves, Cotton & Co. were appointed agents and subsequently became proprietors by purchase, the factory being called the Apollo Mills. It worked profitably till 1919 when it was sold for Rs. 50 lacs to Mr. Isuf Haji Ismail who parted with it in 1923 and the Apollo is now being managed by Messrs. E. D. Sassoon and Co., Ltd.

THE CITY OF BOMBAY MILLS which was started by Mr. Muncherji Nowroji Banaji in 1883 was a very successful spinning concern under Parsee management. It was, however, partially destroyed by fire in 1903 and had to be wound up and reconstructed as the New City of Bombay Mills in 1906 under the agency of Messrs. Bradbury Brady and Co. After the death of Mr. Bradbury in 1916 the agency of the mill was transferred to Messrs. W. H. Brady and Co., Ld., in 1917, under whose management it has continued to prosper.

THE GREAT EASTERN MILL commenced work in 1860 under an influential Directorate including Messrs. Vinayak Shankersheth, Morarji Goculdas, Nanabhoy Byramji Jeejibhoy and Khatau Makanji. The Company had however to be put into voluntary liquidation in April, 1874, on account of mismanagement by the then Agents. It was reconstructed and called the New Great Eastern Spinning and Weaving Co., Ltd., Mr. Muncherji Nowroji Banaji being appointed secretary and Mr. Dinshaw Wacha (now Sir Dinshaw) as the chief accountant. The mill prospered and yielded handsome returns to the shareholders for over 16 years, but on the retirement of Mr. Banaji the fate of the Company seemed to have been doomed and the frequent and continual disputes between Directors and Agents brought on heavy losses. The situation was aggravated by gross irregularities and even thefts and corruption on the part of the mill staff, two of whom were convicted and sentenced to rigorous imprisonment. Eventually the agency was transferred to Messrs. W. H. Brady and Co., Ltd., in 1907 from which date the working has been satisfactory and prosperous.

The Late Mr. JOHN HERBERT DUNKERLEY,
Manager of the Greaves Cotton Group of Mills from 1877 to 1897.

THE STAFF OF THE ANGLO-INDIAN MILLS IN 1902.

THE NAIGAUM MILL went into liquidation in 1888 when it was closed and dismantled.

THE NICHOL MILL went into liquidation in 1879; it was reconstructed and worked till 1890 when it was destroyed by fire and closed.

THE BLUE MILL was started in 1885 by Mr. Temulji Dhunjibhoy, manager of the Prince of Wales Mills. The concern was turned into the Laljee Mills in 1887 and was closed in 1890.

THE COLABA SPINNING MILL started by Mr. Nursey Kesowji went into liquidation in 1880 and was amalgamated with the Oriental Mill of Tardeo in 1881 and was closed along with the latter in 1903.

THE HOPE MILL was partially destroyed by fire in 1895 but was reconstructed under the name of the Prospect Mills by Sir Cowasjee Jehangir, Bart., who sold it at a very handsome price in 1924 and is now working as the Diamond Mills.

THE WADIA MILL was the second enterprise of Mr. Nusserwanjee Ardeshir Wadia who had started the Dhun Mill in 1884. It was, however, transferred to Messrs. Jairam, Naranjee & Co. in 1894, and was destroyed by fire in 1903 and subsequently closed.

THE ARKWRIGHT became the Girgaum Mills in 1880 and was purchased by Messrs. Shantaram Narayan & Co. in 1883 and called the Narayan Mills. It went into liquidation in 1888 and became the Mahomedan Mills under Messrs. Heptoola Shaikh Adam & Co. It was, however, closed and dismantled in 1903.

THE MANDVI MILL went into liquidation in 1879; was turned into the Mahaluxmi Mills in 1883 and was purchased by Mr. Morarji Gokuldas in 1880 and managed by Messrs. Morarji Goculdas & Co. The Company had to be wound up in 1908-09 and the machinery was sold to Messrs. Padamji & Co. of Poona for their Spinning Mill at Gadag. The building is now being used as a warehouse

THE RIPON MILL was started by Mr. Nanabhoy Byramjee Jeejeebhoy as an influential Parsi enterprise and worked well but came to grief in 1913. As Mr. Rustomji Byramji Jeejeebhoy had advanced large sums of money it was sold by him in 1914 and reformed and turned into the Bradbury Mills of the present day.

ILLS WHICH WENT INTO LIQUIDATION OR ARE NOW WORKING UNDER DIFFERENT NAMES.

(Total 45.)

When Started.	*Original Name.*	*Year of Last Transfer.*	*Present Name.*
1865	Albert (Parel) (Ookerda Khetsey) (Wahalan).	1903	New Islam.
1868	Alexandra.	1880	Alexandra.
1874	Anglo-Indian.	1922	Apollo.
1890	Balladina.	1891	Standard.
1888	Bombay National.	1903	Swan.
1854	Bombay Spinning Mill.	1887	Motilal Pitty Mills.
1857	Bombay Throstle Mill.	1864	Alliance.
1888	Britannia.	1919	Phœnix.
1883	City of Bombay.	1905	New City of Bombay.
1860	Coorla (Dharamsey Poonjabhai).	1887	Swadeshi.
1874	Coorla.	1888	Coorla.
1883	Connaught.	1915	Sir Shapurji Broacha Mills.
1893	Damodar.	1905	Crescent.
1884	Dhun.	1902	Crown.
1896	Diamond (Rehmani, Ramdas).	1917	Birla No. 1.
1883	Empress.	1915	Sir Shapurji Broacha Mills.
1895	Empress (New).	1915	,, ,, ,, ,,
1883	Essa Calipha.	1892	Jam.
1883	Gordon	1892	Bomanji Petit.
1890	Hope (Prospect)	1919	Diamond.
1882	Imperial	1915	Kastoorchand.
1890	Indo-China	1919	Birla No. 2.
1872	Jadowji Raghowji	1894	Madhowji Dharamsi.
1883	James Greaves.	1915	Sir Shapurji Broacha (now Indian Woollen Mill).
1888	Jubilee.	1911	Jubilee.
1883	Lakhmidas.	1911	Dawn.
1889	Lord Reay.	1919	Bombay Industrial.
1905	Matunga.	1914	Weljee Dharamsey.
1874	Mazgaon.	1903	Emperor Edward.
1896	Naranji.	1910	Meyer Sassoon.
1876	Nursey Kesowji.	1880	New Kaiser-i-Hind.
1890	Peeroo Mahomed (Coronation).	1920	Killachand.
1883	People of India.	1905	Rachael.
1906	Pioneer (Lord Reay No. 2).	1919	Bombay Industrial.
1874	Prince of Wales (Hongkong in 1891).	1925	Manchester.
1883	Queen.	1917	Mathradas.
1883	Ripon.	1914	Bradbury.
1890	Royal (Fleming).	1879	Dinshaw Petit.
1889	Sorab.	1917	Ruby.
1888	Star.	1917	Planet.
1890	Sun Mills.	1917	Madhorao Scindhia.
1897	Tapidas.	1922	Elphinstone.
1898	Tricumdas.	1909	Edward Sassoon.
1888	Union Mills (Dadar).	1910	Kohinoor.
1894	Victoria.	1905	(New) Victoria.

MILLS BURNT DOWN, DISMANTLED AND CLOSED.

(Total 12.)

Started.	*Mills.*	*Closed.*	*Started.*	*Mills.*	*Closed.*
1861	Arkwright (Girgaon—Narayan—Mahomedan)	1903	1884	Naigaum	1888
1885	Blue Mill (Laljee Mill)	1890	1874	National (Saraswati)	1923
1874	Colaba Spinning Mill	1901	1874	Nichol	1890
1886	Howard and Bullough	1921	1858	Oriental (Adamji)	1903
1883	Leopold	1909	1872	Soonderdas	1906
1874	Mandvi (Mahaluxmi)	1908	1888	Wadia	1903

MILLS WHOSE AGENCIES HAVE BEEN TRANSFERRED VOLUNTARILY.

(Total 16.)

Started.	*Original Name.*	*Year of Final Transfer.*	*Present Name.*
1896	Assur Virjee	1923	Assur Virjee.
1885	Bombay Cotton	1909	Bombay Cotton.
1860	Bombay United	1925	Swadeshi.
1889	China	1921	New China.
1874	Colaba Land	1904	Colaba Land.
1888	David	1924	David.
1898	David No. 2	1924	David No. 2.
1896	Globe	1913	Globe.
1896	Gold Mohour	1925	Gold Mohour.
1885	Jamshed	1895	Jamshed.
1872	Jivraj Balloo	1905	Jivraj Balloo.
1914	Kastoorchand	1922	Kastoorchand.
1860	Great Eastern	1874	New Great Eastern.
1885	Presidency	1916	Presidency.
1915	Simplex.	1925	Simplex.
1888	Union (Parel)	1909	Union.

MILLS WORKING UNDER THE ORIGINAL AGENCIES.

(Total 24.)

Started.	*Mills.*	*Started.*	*Mills.*
1898	Century.	1899	Mahomedbhoy.
1888	Currimbhoy.	1861	Maneckji Petit.
1883	E. D. Sassoon.	1896	Moon.
1896	Ebrahim Pabani.	1870	Morarji Gokuldas.
1905	Fazulbhoy.	1913	Pearl.
1906	Finlay.	1921	Premier.
1883	Framji Petit.	1874	Sassoon.
1873	Hindustan.	1908	Spring.
1884	Indian Manufacturing.	1915	Tata.
1893	Jacob Sassoon.	1896	Textile.
1874	Khatau.	1880	Western India.
1896	Kohinoor.	1915	Zenith.

Summary of Mills Erected, Closed and Working.

In the above lists we have accounted for each of the 97 cotton mills which were erected in Bombay between 1855 and 1925 and it will be seen that—

45 mills were taken into liquidation and reconstructed under other names;

12 mills were burnt or closed and dismantled;
16 mills transferred their Agencies voluntarily; and
24 mills are still working under the same Agencies.

Of the last mentioned batch of 24 mills, 14 are modern concerns: 5 were started between 1885-90 while only 5 belong to the group of the pioneer factories projected before 1875 and include the Maneckji Petit, Morarji Goculdas, Hindustan, Khatau Makanji and Sassoon Mills.

The Five Surviving Pioneer Concerns.

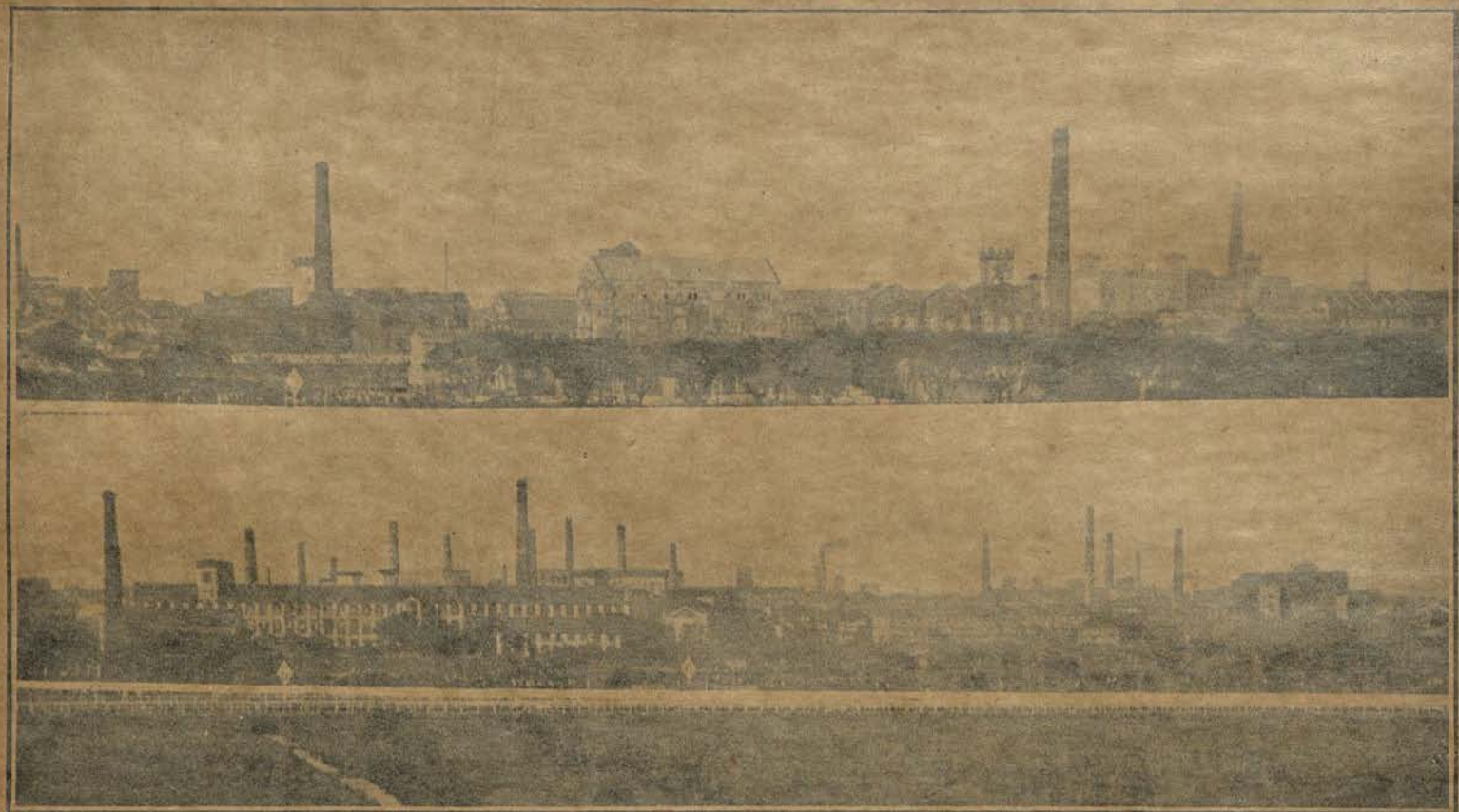
The Maneckji Petit Mill was started in 1861 and has been one of the most prominent of joint stock concerns in the Presidency. The Morarji Goculdas Mill, which was orginally a jute and wool factory, was converted into a cotton spinning and weaving mill in 1870 by Mr. Morarji Goculdas whose untimely death in October 1880, at the early age of 47, deprived the Bhattia community of a highly progressive and enlightened member. The Morarji Goculdas Mill has, however, not only maintained the prestige of the founder, but has progressed with the times and now ranks amongst the best equipped and most prosperous of modern factories. The Hindustan Mill, started in 1873, was the first enterprise of the firm of Messrs. Thackersey Moolji & Co., their subsequent ventures being the Western India and the Indian Manufacturing Co., which have all been highly successful. The Khatau Mills were projected in 1874 by Mr. Dwarkadas Vusonji in partnership with Mr. Khatau Makanji and has seen prosperous days along with the sister factories under Bhattia management. The Sassoon Mill, started in 1874, is not only one of the pioneer factories in India, but is the first to be projected by a member of the Jewish community—the late Mr. David Sassoon. However, the buildings and plant have all been rebuilt and renovated and the Sassoon Mill is now a modern factory in every respect.

The Position of the Mills in 1925.

The Cotton Mills of Bombay have passed through periods of prosperity and trade depression, of plague, famine, strikes, riots and foreign competition and are now giving employment to 148,000 workpeople in charge of 3,428,000 spindles and 71,000 looms comprised in the 82 factories which have converted the fields and open spaces of the Island into a manufacturing town of the greatest magnitude and importance in the Country.

[Photo: Bombay Gazetteer.

VIEW OF THE FIELDS AND OPEN SPACES ON PAREL ROAD IN 1865, NOW CONVERTED INTO THE LARGEST CENTRE OF THE MILL INDUSTRY.—*Vide* Page 39.



THE MILL AREA AT PAREL IN 1925 COMPARED WITH 1865—*Vide* Page 38. [*Photo Copyright*

COTTON SPINNING AND WEAVING

No.	MILL COMPANIES.	SITUATION OF MILL.	LOOMS.	SPINDLES.
1.	Alliance Cotton Mfg. Co., Ltd.	Tardeo.	592	28,116
2.	Apollo Mills, Ltd.	DeLisle Road.	896	39,654
3.	Assur Veerjee Mills, Ltd.	Lower Parel.	600	39,208
4.	Birla Mills, Ltd., No. 1.	Elphinstone Road.	*Nil*	19,086
5.	Birla Mills, Ltd., No. 2.	Sewri Road, Parel.	400	25,592
6.	Bombay Cotton Mfg. Co., Ltd.	Kalachowkie Road.	795	33,648
7.	Bombay Dyeing and Mfg. Co., Ltd. (Spring Mills).	Naigaum Road.	3,116	109,848
8.	(Textile Mills).	Elphinstone Road.	1,694	70,448
9.	Bombay Industrial Mills Co., Ld.	Ferguson Road.	566	24,432
10.	Bradbury Mills, Ltd.	Ripon Road.	662	35,884
11.	Century Spg. & Mfg. Co., Ltd.	Elphinstone Road.	2,996	104,680
12.	(Zenith Mill).			
13.	Colaba Land & Mill Co., Ltd.	Victoria Bunder, Colaba.	697	44,792
14.	Jehangir Wadia Mill.			
15.	Coorla Spg. & Wvg. Co., Ltd.	Coorla (Thana Dist.)	719	27,640
16.	Crescent Mills Co., Ltd.	Ferguson Road.	1,054	44,688
17.	Crown Spg. & Mfg. Co., Ltd.	Parbadevi Rd. Parel	968	41,768
18.	Currimbhoy Mills Co., Ltd. (including Mahomedbhoy)	DeLisle Road, Lower Parel.	1,050	86,804
19.	David Mills Co., Ld., Nos. 1 & 2.	Carrol Road, Parel.	1,130	82,626
20.	Dawn Mills Co., Ltd.	Ferguson Road	*Nil.*	39,816
21.	Diamond Spg. & Wvg. Co., Ltd.	DeLisle Road, Parel.	758	34,552
22.	Ebrahimbhoy Pâbaney Mills Co., Ltd.	DeLisle Road, Parel.	1,054	57,880
23.	E. D. Sassoon United Mills, Ltd. (Alexandra Mills).	Gorupdeo Road.	800	37,120
24.	(E. D. Sassoon Mill).	Gorupdeo Road.	841	90,026
25.	(Jacob Sassoon Mill).	Supari Bagh Road.	2,221	100,832
26.	(Rachel Sassoon Mill).	Chinchpoogly Road.	2,020	*Nil.*
27.	(Turkey Red Dye Works).	Cadell Road.	*Nil.*	1,360
28.	*(Manchester Mill).	Chinchpoogly Road.	850	25,444
29.	Edward Sassoon Mills, Ltd.	Ferguson Road, Parel.	868	45,408

*Late Hongkong Mills

MILLS IN BOMBAY—1925.

PAID-UP CAPITAL. Rs.	AGENTS.	REGISTERED OFFICES IN BOMBAY.
7,00,000	Morarbhai Vijbhukhandas & Co.	43, Apollo Street, Fort.
25,00,000	E. D. Sassoon & Co., Ltd.	Dougall Road, Ballard Estate.
31,97,820	H. F. Commissariat & Co.	Commissariat Building, Hornby Road.
60,98,800	Allana Rahimtula & Co.	Church Gate Street, Fort.
22,40,770	Hormusjee Sons & Co.	Commissariat Building, Hornby Road.
62,74,500	Nowrosji Wadia & Sons.	Forbes Building, Home Street, Fort.
9,98,750	W. H. Brady & Co., Ltd.	12/14 Church Gate Street, Fort,
24,85,000	Currimbhoy Ebrahim & Sons, Ltd.	Outram Road, Fort.
18,50,000	C. N. Wadia & Co.	Gresham Building, Esplanade Road, Fort.
28,00,000	W. H. Brady & Co., Ltd.	12/14, Church Gate Street.
13,00,000	Cowasji Jehangir & Co., Ltd.	Church Gate Street, Fort.
15,00,000	Currimbhoy Ebrahim & Sons, Ltd.	Outram Road, Fort.
8,00,000	Purshotum Vithaldas & Co.	16, Apollo Street, Fort.
22,00,000	Currimbhoy Ebrahim & Sons, Ltd.	Currimbhoy House, Outram Road, Fort.
24,00,000	E. D. Sassoon & Co. Ltd.,	Dougall Road, Ballard Estate.
8,00,000	Sassoon J. David & Co., Ltd.	143, Esplanade Road, Fort.
39,17,918	Gulabchand Devchand & Co.	16, Apollo Street, Fort.
20,00,000	Currimbhoy Ebrahim & Sons, Ltd.	Currimbhoy House, Outram Road, Fort.
6,00,00,000	E. D. Sassoon & Co., Ltd.	Dougall Road, Ballard Estate.
17,00,000	E. D. Sassoon & Co., Ltd.	Dougall Road, Ballard Estate.

and Wadia Woollen Mills.

COTTON SPINNING AND WEAVING

No.	MILL COMPANIES.	SITUATION OF MILLS.	LOOMS.	SPINDLES
30.	Elphinstone Spg. & Wvg. Mills Co., Ltd.	Elphinstone Road, Parel.	764	49,064
31.	Emperor Edward Spg. & Mfg. Co., Ltd.	Reay Road, Mazgaon	1,383	46,452
32.	Fazulbhoy Mills, Ltd.	DeLisle Road, Parel.	1,268	52,256
33.	Finlay Mills, Ltd.	Parel, Lalbaug.	812	46,072
34.	Framjee Petit Spg. & Mfg. Co., Ltd.	Reay Road, Mazgaon	929	32,584
35.	Globe Manufacturing Co., Ltd.	DeLisle Road, Parel.	744	29,104
36.	Gold Mohur Mills, Ltd.	Old Dadar Road.	1,040	42,472
37.	Hindoostan Spg. & Wvg. Mills Co., Ltd.	Ripon Road, Jacob Circle.	1,167	41,056
38.	Indian Manufacturing Co., Ltd.	Ripon Road.	960	41,328
39.	Jam Manufacturing Co., Ltd.	Lalbaug, Parel.	874	30,570
40.	Jamshed Manufacturing Co., Ld.	Ferguson Road.	494	31,300
41.	Jivraj Baloo Spg. & Wvg. Co., Ltd.	Tardeo.	663	33,516
42.	Jubilee Mills, Ltd.	New Sewree Road.	452	39,252
43.	Kastoorchand Mills Co., Ltd. (Kastoorchand Mill).	Dadar.	913	32,704
44.	(Imperial Mill).	Haines Road.	*Nil.*	46,620
45.	Khatau Makanji Spg. & Wvg. Co., Ltd.	Haines Road, Byculla.	1,512	62,844
46.	Killachand Mills, Ltd.	Haines Road.	*Nil.*	43,846
47.	Kohinoor Mills Co., Ltd.	Dadar.	1,394	68,906
48.	Madhorao Scindia Mills, Ltd.	Lower Parel.	604	44,320
49.	Madhowji Dharamsi Mfg. Co., Ltd.	Foras Road, Tardeo.	903	37,812
50.	Manockji Petit Mfg. Co., Ltd. Maneckji Petit Mills	Tardeo.	2,379	68,996
51.	Dinshaw Petit Mills.	Parel, Lalbaug.	1,358	42,296
52.	Bomanjee Petit Mills.	Mahaluxmi.	1,263	42,368
53.	Mathradas Mills, Ltd.	DeLisle Road, Parel.	907	43,596

MILLS IN BOMBAY—1925—*contd.*

PAID-UP CAPITAL. Rs.	AGENTS.	REGISTERED OFFICES IN BOMBAY.
50,00,000	E. D. Sassoon & Co., Ltd.	Dougall Road, Ballard Estate.
15,00,000	B. D. Petit Sons & Co.	7/11, Elphinstone Circle, Fort.
18,00,000	Currimbhoy Ebrahim & Sons Ld.	Outram Road, Fort.
20,00,000	James Finlay & Co., Ltd.	Chartered Bank Building, Fort.
12,50,000	D. M. Petit Sons & Co.	359, Hornby Road, Fort.
10,00,000	Turner, Morrison & Co., Ltd.	16, Bank Street, Fort.
30,62,450	James Finlay & Co., Ltd.	Chartered Bank Buildings, Fort.
12,00,000	Thackersey Mooljee & Co.	16, Apollo Street, Fort.
9,00,000	Damodar Thackersey Moolji & Co.	16, Apollo Street, Fort.
12,00,000	Waljee Shamjee & Co.	4, Dalal Street, Fort.
13,32,100	Hormusjee Ardeshir & Son.	Commissariat Building, Hornby Road.
11,00,000	Abdoolabhoy Joomabhoy Laljee & Co.	Sleater Road, Grant Road.
15,00,000	Mangaldas Mehta & Co.	123, Esplanade Road, Fort.
47,74,750	Currimbhoy Ebrahim & Sons, Ltd.	Outram Road, Fort.
29,95,000	Khatau Makanji & Co.	Luxmi Building, 42, Ballard Pier, Fort.
40,33,445	Killachand Devchand & Co., Ltd.	55, Apollo Street, Fort.
20,00,000	Killick, Nixon & Co.	Home Street, Fort.
38,00,000	Currimbhoy Ebrahim & Sons, Ld.	Outram Road, Fort.
20,23,750	Goculdas Madhowji Sons & Co.	Commissariat Building, Hornby Road.
36,09,500	D. M. Petit Sons & Co.	359, Hornby Road, Fort.
24,00,000	Currimbhoy Ebrahim & Sons, Ltd.	Outram Road, Fort.

No.	MILL COMPANIES.	SITUATION OF MILLS.	LOOMS.	SPINDLES.
54.	Meyer Sassoon Mills, Ltd.	Ferguson Road.	1,012	42,312
55.	Moon Mills, Ltd.	Sewree New Road.	756	38,494
56.	Morarji Goculdas Spg. & Wvg. Co., Ltd.	Siparibagh Road, Parel.	1,607	82,532
57.	New China Mills, Ltd.	Sewree.	*Nil.*	46,064
58.	New City of Bombay Mfg. Co., Ltd.	Albert Road, Chinchpoogly.	*Nil.*	47,160
59.	New Great Eastern Spg. & Wvg. Co., Ltd.	Parel Road, Chinchpoogly.	1,058	49,668
60.	New Islam Mills.*	Suparibagh Road.	560	19,652
61.	New Kaiser-i-Hind Spg. & Wg. Co., Ltd.	Gorupdeo Road, Chinchpoogly.	1,104	40,944
62.	Pearl Mills, Ltd.	DeLisle Road, Parel.	1,760	49,356
63.	Phœnix Mills, Ltd.	Ferguson Road.	696	52,500
64.	Planet Mills, Ltd.	Ferguson Road.	929	31,586
65.	Premier Mills, Ltd.	Ferguson Road.	472	15,260
66.	Presidency Mills Co., Ltd.	Ferguson Road.	840	32,624
67.	Raja Bahadur Motilal Pitty Mills.*	Tardeo.	*Nil*	18,908
68.	Ruby Mills, Ltd.	Dadar.	365	11,696
69.	Sassoon Spg. & Wvg. Co., Ltd.	Mazgaon.	1,222	66,240
70.	Simplex Mills Co., Ltd.	Clerk Road, Byculla.	1,230	37,208
71.	Sir Shapurji Broacha Mills, Ltd. (Connaught Mill).	DeLisle Road, Chinchpoogly.	697	97,284
72.	(Empress Mill).			
73.	(New Empress Mill).			
74.	Standard Mills Co., Ltd.	Parbhadevi Road.	1,179	44,536
75.	Swadeshi Mills Co., Ltd.	Kurla.	1,542	59,084
76.	No. 2 (Bombay United).	Charni Road.	1,187	45,128
77.	Swan Mills, Ltd.	Sewree, Bombay.	600	31,616
78.	Tata Mills, Ltd.	Dadar Road, Parel.	1,800	63,248
79.	Union Mills, Ltd.	DeLisle Road, Parel.	866	38,176
80.	Victoria Mills, Ltd.	Gamdevi Road.	556	27,000
81.	Weljee Dharamsey Mill.*	Sewree Cross Road.	*Nil*	6,000
82.	Western India Spg. & Mfg. Co., Ltd.	Kalachowkie Road.	977	41,760

* Private

MILLS IN BOMBAY—1925—*concld.*

PAID-UP CAPITAL. Rs.	AGENTS.	REGISTERED OFFICES IN BOMBAY.
10,00,000	E. D. Sassoon & Co., Ltd.	Dougall Road, Ballard Estate.
2,50,000	P. A. Hormarjee & Co.	70, Forbes Street, Fort.
11,50,000	Morarji Goculdas & Co.	Sudama House, Ballard Estate, Fort.
13,25,000	Pransukhlal Mafatlal.	Church Gate Street, Fort.
6,00,000	W. H. Brady & Co., Ltd.	12/14, Churchgate Street, Fort.
23,00,000	W. H. Brady & Co., Ltd.	12/14, Churchgate Street, Fort.
	Mafatal Gagalbhai (Lessee).	Church Gate Street, Fort.
9,00,000	Vusunjee Munjee & Co.	Elphinstone Circle.
19,97,000	Currimbhoy Ebrahim & Sons, Ltd.	Outram Road, Fort.
8,00,000	Ramnarain Hurnandrai & Sons.	143, Esplanade Road, Fort.
15,00,000	Tillockchand Kalyanmal & Co.	168/72, Kalbadevi Road.
19,97,880	Currimbhoy Ebrahim & Sons, Ltd.	Outram Road, Fort.
12,00,000	Ragavji Maganlal & Co.	9, Bank Street, Fort.
	Raja Bahadur Govindlal Shivlal Motilal (Owner).	Apollo Street, Fort.
12,00,000	Hormusjee & Co.	Commissariat Building, Hornby Road.
22,50,000	David Sassoon & Co., Ltd.	59, Forbes Street, Fort.
22,50,000	Allen Bros. & Co. (India), Ltd.	Canada Building, Hornby Road.
74,94,695	Mathradas Goculdas & Co.	Commissariat Building, Hornby Road.
12,00,000	Tata Sons, Ltd.	Bombay House, Bruce Street.
20,00,000	Tata Sons, Ltd.	Bombay House, Bruce Street.
[illegible],62,000	James Finlay & Co., Ltd.	Chartered Bank Buildings, Fort
[illegible]100	Tata Sons, Ltd.	Bombay House, Bruce Street.
[illegible]000	David Sassoon & Co., Ltd.	59, Forbes Street, Fort.
[illegible]000	Mangaldas Mehta & Co.	123, Esplanade Road, Fort.
	Weljee Dharamsey & Co. (Owners)	Dubash Wadi Lane, Girgaon.
[illegible]000	Thackersey Mooljee Sons & Co.	16, Apollo Street, Fort.

Mill Flotation in Bombay: How it has been accomplished.

THE method of projecting cotton mills in Bombay has not only differed from the general procedure adopted in Lancashire but it has also varied at different stages of the industry. The pioneer factories were started by Parsi merchants and bankers mainly with their own capital and with contributions from friends and relations. The Bhattia mill promoters who joined in the enterprise at a very early stage also took up the bulk of the share capital themselves and allotted the rest among the members of their community. Thus the industry progressed with fully paid-up or sufficient capital in almost every case and the factories were built and equipped with the best machinery available on cash terms and started without any debt or encumbrance. The business was managed by Agents who had a substantial stake in the undertaking and while they were ignorant of the machinery and processes of manufacture they possessed intimate knowledge of the cotton trade and gave careful and personal attention to the economic working of the different departments. In these circumstances the majority of the pioneer factories prospered and further projects were undertaken towards which the general public contributed liberally and lessened the burden and risk of the mill Agents.

The boom period in the industry came after the advent of the Ring Spinning Frame at Mr. Jamsetji Tata's Empress Mill at Nagpur and its subsequent introduction in Bombay on a large scale by Messrs. Greaves, Cotton & Co. in 1884. The group of ring spinning factories which were inaugurated by this firm on De Lisle Road met with ready response from investors and their popularity and success stimulated further enterprise and cotton mill flotation absorbed the attention of capitalists more than any other industrial venture between 1885 and 1895.

The Adventurous Mill Promoter.

On the other hand, the profitable nature of the business and th tages of a mill agency created a new and speculative class of com moters who had little experience of the cotton trade and limited resources. The terms on which these new-comers proposed to sta mills and manage them with public money were amazingly unbu and one-sided. In the case of an up-country mill promoter of this c was no other qualification save that his father was a cotton merch a ginning factory in the Gujerat district. He possessed land in Bo which he proposed to build a cotton mill and sent the draft Prospe the Articles of Association and Agency Agreement to an enterprisin in this city requesting him to join as a Director and otherwise h formation of the company. The latter submitted the propos solicitor—a well-known English lawyer—who returned the paper following remarks :—

"This company is being formed to purchase the land of B at a fabulous price; to build a cotton mill thereon for the benefit of B and to appoint him and his nominees Agents for life and secure employment for their friends and relatives."

Companies projected on these lines did not go beyond the stage of Registration or the issue of the Prospectus while those who could muster a portion of the capital from unwary investors and signed the contracts for the building and machinery came to grief before the engines could be started under the baton of the mortgagee in possession.

The Collection of Capital.

Activity in mill building, however, continued between 1885 and 1898 as the small capitalists could get subscriptions on the promise of a share in the agency commission. Cotton merchants, coal dealers and store suppliers also came to the help of the mill promoter on the prospects of securing a monopoly for the supply of these necessary commodities to the mills. The contract for the cartage of the company's cotton, machinery and other requirements was given to those who took a large number of shares while the building contractor had to accept a substantial sum in script for his work in lieu of cash. The machinery order was also placed with Makers whose representatives in India could offer tempting commissions to the promoters with a lion's share for the managing partner.

Deferred Payment for Machinery.

In addition to these facilities the mill promoter received accommodation from the machinery makers in the shape of deferred payments and a contribution towards the share capital from their Agents in India. The price of machinery in these days ranged from Rs. 7,00,000 to Rs. 8,00,000 for an average size mill and the commission of the machinery agent came to half a lakh of rupees at the rate of 5 per cent. including accessories and spareparts. He could thus afford to invest a substantial portion of this in the mill project in order to secure the order against competition. The shares could be sold at a discount after the mill commenced working leaving enough in hand for investing in another concern and securing the order for machinery. Thus the machinery agents' commission from one mill paved the way for the order for another whose promoters were short of capital. If a contribution like this did not suffice to buy the plant on cash terms the machinery makers were induced to accept the order on the basis of deferred payment. In this case one-third of the total value of the machinery was to be paid in cash with order and the balance by small instalments after delivery and after the mill commenced working, the plant being mortgaged to the machinery suppliers with interest which rarely exceeded 6 per cent. per annum. This arrangement gave time to the agents and directors of the mill to allot the remaining shares or to call for the unpaid capital which investors did not hesitate to

pay seeing that the mill had commenced working. Thus Lancashire machinery manufacturers and exporters were in a way instrumental in furthering the development of the textile industry in India in competition with the imports of British-made piece-goods and fabrics.

It should, however, be noted that the system of deferred payment was restricted chiefly to newly started Machinery Works and to makers who were anxious to secure a footing in the Indian market in competition with the established firms. Factories that were started under these encumbrances found it difficult to make satisfactory headway and as they were invariably managed on the basis of a commission on production for the Agents, dividends for the shareholders could only be secured after paying off the debts and liabilities. The machinery equipment of these concerns was also defective and inadequate and could not yield the best results in point of production and quality especially when cheap and inferior plant was selected and several came to grief after a few years working.

The fate of these factories served as a warning to investors and adventurous mill building with inferior and unsuitable machinery surcharged with deferred payments and surreptitious commissions have been unknown in recent years except in isolated cases.

FEMALE OPERATIVE IN A BOMBAY MILL.
Working the hand pirn winding machine surrounded by thousands of power spindles, looms, and bleaching and finishing machinery from Lancashire.

The Agency System of Mill Management.

WHILE the pioneers of the mill industry in Bombay started with the choicest of British-made machinery and British brains and skill in the erection and working of the factories, they created a system of their own for the management of the business. The Lancashire mills were managed by qualified and experienced Managing Directors who received a salary and worked under the supervision and control of the Board of Directors. In Bombay the promoters themselves became self-appointed Agents under the Articles of Association; the Directors were the friends and relatives of the Agents and were nominated by them along with the Auditors and Accountants. The Agents had full executive powers in the management of the mills and the purchase of cotton and sale of yarn, and they could be interested in any other mill in a similar capacity or own and work a mill themselves or deal in cotton, yarn and other commodities on their own account. The remuneration of the Agents was generally fixed on the basis of a quarter anna commission on every pound of yarn produced during a year whether the mill yielded a profit or not. The Companies being projected by wealthy citizens they could subscribe to a substantial portion of the share capital and also attract the larger investors who were given an interest in the business in addition to the dividends. In short, the powers of the Agents under the Articles and the Agency Agreement exceeded those of the shareholders who had very little voice in the management of the factories.

On the other hand, the mill Agents contended that they were contributing largely towards the formation of the Company, that they were running considerable risk in the new ventures and had also to be responsible for the financing of the business, and consequently they had to cover themselves by a remuneration whether the mill made a profit or not.

This looked at first sight to be a one-sided arrangement, but the Agency system suited the trade conditions of Bombay and the interests of investors and has been followed up to the present day with variations in the remuneration of the Agents.

In fact it may be said that the expansion of the mill industry in Bombay has been due in a great measure to the enterprise and financial resources of the Mill Agents and if the interests of the shareholders have suffered, as they no doubt have in several instances, it has been due not to the Agency system itself but to its misuse in incompetent or unscrupulous hands. The trade depression which followed the period of plague and famine in 1900 affected the position of Joint Stock concerns which necessitated the stoppage of several Agencies and the change of management of the mills to existing firms or to newly formed Agencies. In no case, however, was an attempt made by the shareholders to entrust the management in the hands of a paid manager or director on the lines of Lancashire factories.

Mismanagement and Corruption.

While the Agency system of management of the Bombay cotton mills has proved its value and advantages in honest and competent hands, it has turned out disastrous for the shareholders in other cases. Until about 1888 the Agents were almost exclusively drawn from the merchant classes and were ignorant of the machinery and processes of manufacture. The spinning and weaving was supervised by managers and overlookers from Lancashire with the help of Parsi assistants and Hindu jobbers. The large profits were mainly due to the low price of labour and raw material, to the scarcity of factories and a continued demand for local production. There were large reserves even after the payment of dividends which brought on easy-going methods and irregularities in the management of certain concerns. The Agents were mainly responsible for this, but their greed for money and ignorance of the inner working of the various departments could not control the leakage that was taking place in every direction. A salaried Manager or Director in Lancashire could be easily called to account for incompetence or misfeasance. In the case of the Bombay Mill Agent the shareholders had to face the baton of the agency agreement and the counter-votes of fellow-investors who had also their fingers in the mill pie. Thus the mismanagement and irregularities continued for several years and till the mill dividends showed signs of diminution and the Agents insisted on their commission on production in defiance of the rights of the shareholders.

Shareholders' Protests.

The laxity of the Agents and their technical incompetency encouraged irregularities among the mill and office staff who were also tempted to make money out of the business in addition to their salaries. The investing public realised the situation, particularly during the trade depression of 1898-1900, and the independent section of the shareholders openly resented the arbitrary action of the Agents at the annual general meetings when unsatisfactory and evasive replies were given to *bona fide* enquiries regarding the accounts. The Reports and Balance Sheets were however invariably passed and adopted by a packed majority and by temporary or fictitious transfers of shares among the Agents' supporters.

The "Indian Textile Journal" on Mill Mismanagement.

The situation grew worse to the detriment of honest trading and the *Indian Textile Journal* was obliged to criticise and expose instances of irregularities in mill management and the malpractices of Directors and Agents. It was abundantly clear that the latter dealt in cotton and yarn belonging to the mills and speculated in the shares of the Company according to the extent of the profits or losses which they were in a position to ascertain and even modify in the Balance Sheets to suit the situation. Open contracts were entered into by the Agents' firm for the supply of co[illegible] which were complacently passed on to the mill account if the prices b[illegible]

to drop. Speculation remained unchecked in buying and selling on the mill account while a variety of yarn labels were kept in reserve for purposes of unfair competition and spurious imitation. Cotton was purchased by uneducated selectors who were no judges of staple or of value and whose honesty was more than doubtful; it was weighed by corrupt weighers who were bribed for excess weight. Coals were purchased which were defective in quality or weight (or both) and the cotton was manufactured by machinery that was loaded with surreptitious commissions and maintained with stores in which the teeth of the shark had made heavy marks. The factory pay-sheet was surcharged with useless or fictitious employees, and the employees themselves paid *bucksheesh* (bribes) to the jobbers and overlookers. The Board of Directors was faked, the Auditors were chosen for the amiability of their disposition, and lavish office expenses and lawyers' fees added dignity to the business. Every canon of honest trading and manufacturing seemed to have been turned upside down, and the whole when considered together gave one the impression that the industry existed for no other purpose than to support a gigantic system of swindling.

In criticising the situation in November, 1899, the *Indian Textile Journal* remarked :—

"We have in these columns exposed again and again the rascality and rank dishonesty with which large sections of our mill industry are saturated. It is not possible to be as specific and definite as we might, and name those concerns and persons whose affairs merit exposure. We must leave the law courts to do this, bit by bit, as cases come before them. But we should insist upon the urgent need there is for reform, not because the mill industry is worse than many other industries which might be cited, but because it is the chief industry of our city, and because the men therein engaged are some of the most wealthy and influential of our citizens.

* * * * * *

We cannot alter Japanese and Chinese competition, we cannot control the monsoon, we cannot even apparently do much to improve cultivation, and competition with Manchester in the higher counts of yarn and finer fabrics is fraught with many impediments. But the glutted market in the Farther East is entirely of our own making, our miserable mismanagement is our own, our rapacious dishonesty is our own, and local shareholders have only themselves to thank for divided counsels, a lack of energy, and a want of intelligence which constitute powerful temptation to men whose wits are sharper than their own."

The Nemesis of Mismanagement.

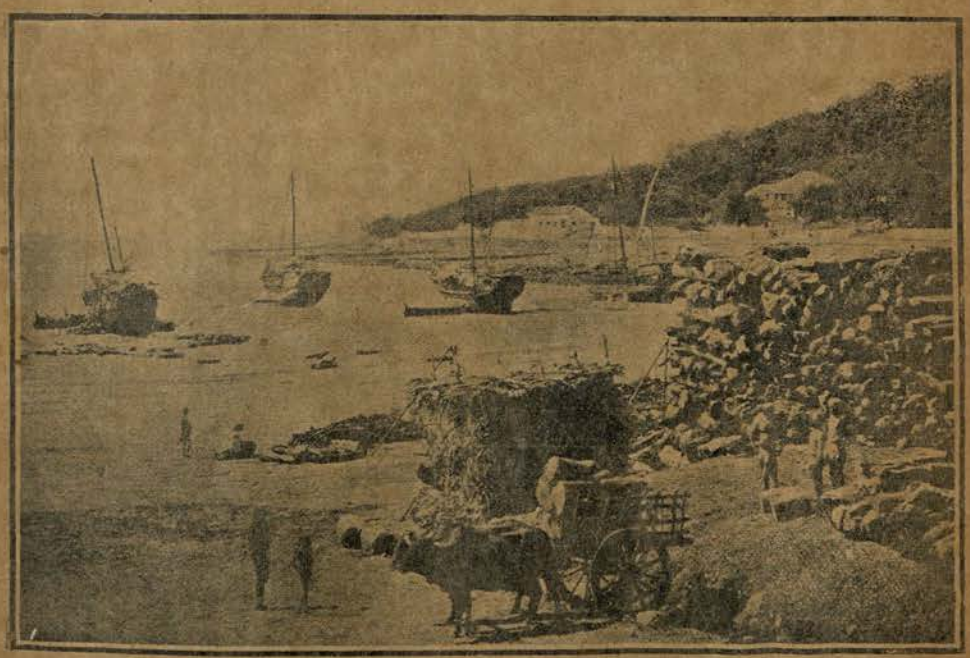
But the nemesis was not long in coming and the chaos and corruption which prevailed brought on the collapse of several concerns. How far the Agents suffered in the transaction it was difficult to estimate, but in almost every case the shareholders were completely ruined while hundreds of workpeople were thrown on the streets till the factories could be restarted under better management.

Change of Agencies and Better Management.

At the same time the disclosures which followed the press criticism brought about changes in the personnel of mill management. The easy-going agents of the merchant class were superseded by competent and experienced mill managers and engineers who were appointed Managing Agents by the shareholders. Mill agencies were also taken up by European and Indian firms of influence and prestige who placed the working of the factories under expert control, and these changes and reforms have, on the whole, worked satisfactorily and in the interest of the shareholders.

It cannot, however, be said that the industry is yet free from the evils of the Agency system. Instances of malpractices which have been cited above would still be found in certain of the Bombay mills whose agents think more of their own gain than the rights of the shareholders and the welfare of the workpeople. The powers of the Agents have been misused even in recent times and costly and up-to-date machinery has brought early ruin to investors on account of the collapse that was bound to follow in the wake of greed and corruption.

On the other hand, there are concerns which have uniformly enjoyed public confidence and whose honest administration is reflected in the working details which are presented in the following pages.



LANDING WOOD FUEL FOR THE MILLS IN 1850. [*Photo: Bom. Gazetteer.*
(Lakri Bundar at Chaupati.)

Bombay Mill Agencies : Past and Present.

The management of the Bombay cotton mills would thus appear to be inseparable from the Agency System, yet the trade conditions and the financial difficulties of the agency firms and other circumstances have brought about various changes which it will be interesting to record. It should, however, be noted that several of the agency firms referred to in the following lists have given up mill management voluntarily and in the interest of the shareholders without any reflection on their ability or resources.

Mill Agencies Discontinued between 1895 and 1905.

Agents.	*Mills.*
Bisondayal Hardayal.	Satya Narayan.
C. & F. Dinshawji.	Victoria.
C. F. Lentine & Co.	Wáhálán (*late* Ookerda Khetsey).
Dwarkadas Vusonji & Co.	Jewraj Ballo.
Heptoola Shaik Adam & Co.	Mahomedan Mills.
Hormasji Assur & Co.	Jamshed, Sorab. Bombay Cotton.
H. N. Wadia & Co.	Diamond.
J. N. Petit & Co.	National. Oriental (Colaba). ,, (Tardeo).
Jairam Damjee & Co.	Jam.
Jairam Naranji Sons & Co.	Wadia Mills.
Jeewandas & Co.	Bombay Cotton.
K. M. Heeramanek & Co.	Queen, Britannia and Star.
Lakhmidas Khimji & Co.	Damodar, Lakhmidas and Tricumdas.
Lang & Co.	Union Spinning, Dadar.
Naranji Dwarkadas & Co.	Naranji.
N. A. Hormarji & Co.	Dhun Mills and Wadia Mills.
Nensey Spencer & Co.	Peeroo Mahomed.
Tapidas Varajdas & Co.	Alliance, Tapidas, Bombay National.
Thackersey Naranji & Co.	Bombay National.
Visram Ebrahim & Co.	Star of India.
Vithaldas Gopaldas & Co.	Union (Parel.)
Vanmalidas J. Shamjee & Co.	New Great Eastern.
Vurjeevandas and Narottamdas Madhowdas.	Kaiser-i-Hind.

Although better times came in 1903 and the mills could show profits there was no eagerness for taking up mill agencies as in previous years. Mill building between 1905 and 1915 was also not so brisk, there being only 8 additions during the ten years. Japan began to compete with Indian yarn in the China market and Bombay spinning mills were seriously affected. Agencies were also transferred for valuable considerations in the case of well-managed concerns and the withdrawals and voluntary retirement of Mill Agents between 1905 and 1915 were as under :

Mill Agencies Discontinued between 1905 and 1915.

Agents.	*Mills.*
Abdul Rehamaney.	Noor Mill.
Assur Virjee & Co.	Sun Mills.
Allana Munji & Co.	Indo-China.
Captain Sheth & Co.	Gold Mohur.
Chhoi Kuka & Co.	Coronation.
Govindjee Thackersey Moolji & Co.	Hongkong Mills.
Greaves, Cotton & Co.	Connaught. Empress (New Empress). Imperial. James Greaves.
Hajibhai Lalji & Co.	Jivraj Baloo.
Haji Cassum.	New Islam.
Khatau Makanji Sons & Co.	Britania.
Khimji Assur & Co.	Assur Mills.
Khote & Co.	Lord Reay.
K. Hathising.	Pioneer.
M. N. Banaji & Co.	City of Bombay.
Nanabhai B. Jejeebhoy & Co.	Ripon.
Rangildas Bhukandas & Co.	Hope.
Ranchordas Narotumdas & Co.	Presidency Mill.
Readymoney Jejeebhoy & Co.	Jubilee.
Sorabji Shapurji & Co.	Globe.
Tricumdas Dwarkadas & Co.	Tricumdas.
Waljee Shamjee & Co.	Matunga Mill.

With the above changes the comparative position of Mill Agencies according to the different communities has been as under :—

	1895.		1915.		1925.	
Communities.	*Agencies.*	*Mills.*	*Agencies.*	*Mills.*	*Agencies.*	*Mills.*
Parsis	15	22	14	25	13	22
Hindus	27	30	11	18	17	19
Mahomedans ..	4	4	7	11	3	15
Jews	1	8	5	17	3	14
Europeans ..	3	6	3	12	5	11
Total ..	50	70	40	83	41	81

Bombay Mill Agents in 1925.

The early post-war conditions proved highly satisfactory for the Bombay mills particularly in 1920-21 when record profits were made and some of the factories were sold at fabulous prices and the Agencies were transferred on liberal terms. At the same time the heavy speculation of this period in land and building and reckless trading and profiteering in all directions exceeded all previous records in the history of the city. But the reaction was not long in coming. The profits of the cotton mills, which seemed to have reached their zenith in 1921, began to decline and the year 1923 made the mill Agents anxious, especially those who had not provided sufficient reserves from the handsome returns of the previous years. The speculation in property and shares, which had enriched all classes for a time, brought heavy losses in their trail, and this, combined with the failure of Joint Stock concerns which were floated haphazardly under the stimulus of war conditions, brought ruin to thousands of the middle classes in this city of wealth and enterprise. The cotton industry was particularly affected as the speculation in mill shares was the heaviest and most widely distributed. These conditions coupled with the banking difficulties of mill Agents necessitated further changes in the mill Agencies during the last five years while Agents and Directors of prosperous concerns preferred retirement on account of advancing age and other personal considerations.

Thus the David Mills which were prosperous concerns under Messrs. Sassoon J. David & Co., Ltd., for 35 years have been taken over by Messrs. E. D. Sassoon & Co., Ltd., and the Standard Mills were transferred to Messrs. Tata Sons, Ltd., by the former firm after managing it for 30 years. Messrs. E. D. Sassoon have also taken over the agency of the Apollo Mills, the Elphinstone Mills and the late Hongkong Mills now called the Manchester Mill.

Messrs. Currimbhoy Ebrahim & Sons, Ltd., have added largely to their original agencies within the last five years including the control of the Bradbury Mills, the Kastoorchand, the Imperial, the Matharadas and the Madhrao Scindia Mills.

The constitution and management of the cotton mills in Bombay is consequently different at the present day compared with the pre-war years as will be seen from the following particulars

Distribution of Mill Agencies in 1924-25.

Communities.	*Agencies.*	*Mills.*	*Spindles.*	*Looms.*	*Hands.*	*Capital.* Rs.
Parsis	13	22	978,200	25,600	54,700	3,59,92,000
Hindus	17	19	831,740	15,150	28,800	3,33,45,000
Mahomedans ..	3	15	587,650	10,810	26,500	3,21,53,430
Jews	3	14	652,000	13,500	25,000	7,61,50,000
Europeans ..	5	11	421,500	8,160	19,500	1,90,11,200
Total ..	41	81	3,417,100	73,220	154,500	19,66,51,600

Parsi Mill Agents.

It will be seen that the Parsis who have the credit of starting the pioneer factories and taking the leading part in the development of the industry, are still heading the list with 22 mills containing 978,200 spindles and 25,600 looms. Of these, Messrs. Tata Sons, Ltd., manage 4 mills with 211,996 spindles and 5,708 looms, Messrs. Nowrosjee Wadia & Sons standing next with 3 mills having 180,296 spindles and 4,810 looms. Messrs. D. M. Petit Sons & Co. control 3 of the Maneckji Petit mills containing 153,660 spindles and 5,000 looms, the other large concern being the Century Mills with 104,680 spindles and 2,996 looms managed by Messrs. C. N. Wadia & Co.

Agents.	*Mills.*	*Paid-up Capital.* Rs.	*Spindles.*	*Looms.*
Hormusjee Ardeshir & Son.	Jamshed	13,32,100	31,300	494
Hormusjee Sons & Co. ..	Bombay Cotton ..	22,40,770	33,648	795
H. F. Commissariat & Co ..	Assur Virjee ..	31,97,820	39,208	600
Hormusji & Co.	Ruby	12,00,000	11,996	365
P. A. Hormarji & Co. ..	Moon	2,50,000	38,494	756
Cowasji Jehangir & Co., Ltd.	Coorla	13,00,000	27,640	719
D. M. Petit Sons & Co. ..	Framji Petit ..	12,50,000	32,584	929
B. D. Petit Sons & Co. ..	Emperor Edward..	15,00,000	46,452	1,383
C. N. Wadia & Co.	Century and Zenith	18,50,000	104,680	2,996
Mangaldas Mehta & Co. ..	Jubilee	15,00,000	39,252	452
	Victoria	8,00,000	27,000	556
	Total, 2 Mills ..	23,00,000	66,252	1,008
Nowrosjee Wadia & Sons ..	Bombay Dyeing ..	62,74,500	109,848	3,116
	Spring		70,448	1,694
	Textile			
	Total, 3 Mills ..	62,74,500	180,296	4,810
Tata Sons, Ltd.	Standard	12,00,000	44,536	1,179
	Swadeshi	20,00,000	104,212	2,729
	No. 2 (Bom. United)			
	Tata..	64,87,100	63,248	1,800
	Total, 4 Mills ..	96,87,100	211,996	5,708
D. M. Petit Sons & Co...	Manockji Petit ..	36,09,500	68,996	2,379
	Dinshaw Petit ..		42,296	1,358
	Bomanji Petit ..		42,368	1,263
	Total, 3 Mills ..	36,09,500	153,660	5,000

	Mills.	*Capital.*	*Spindles.*	*Looms.*
Total ..	**22**	**3,59,92,000**	**978,200**	**25,600**

Hindu Mill Agents.

The HINDUS come next with 19 factories containing 831,740 spindles and 15,150 looms, the largest single concern being the Morarji Goculdas Mill with 82,532 spindles and 1,607 looms. A very substantial proportion of the mills are managed by Bhatia merchants who were the only other community, besides the Parsi, that ventured extensively on mill building during the first thirty years of the existence of the mill industry in Bombay.

Agents.	*Mills.*	*Paid-up Capital.*	*Spindles.*	*Looms.*
		Rs.		
Thackersey Mooljee & Co.	Hindoostan ..	12,00,000	41,056	1,167
Damodar Thackersey Moolji & Co.	Indian Mfg. ..	9,00,000	41,328	960
Thackersey Mooljee Sons & Co.	Western India ...	12,00,000	41,760	977
Vusonjee Munjee & Co...	New Kaiser-i-Hind	9,00,000	40,944	1,104
Gulabchand Devchand & Co.	Diamond ..	39,17,918	34,552	758
Goculdas Madhowjee Sons & Co.	Madhowji Dharamsi ..	20,23,750	37,812	903
Khatau Makanji & Co.	Khatau Makanji..	30,00,000	62,844	1,512
Killachand Devchand & Co., Ltd.	Killachand ..	40,33,445	43,846	*Nil*
Mathradas Goculdas & Co.	Sir Shapurji Broacha Mills:— Connaught, Empress & New Empress.	74,94,695	97,284	697
Morarbhai Vijbhukhandas & Co.	Alliance ...	7,00,000	28,116	592
Morarjee Goculdas & Co.	Morarjee Goculdas	11,50,000	82,532	1,607
Pransukhlal Mafatlal & Co.	New China ..	13,25,000	46,064	*Nil*
Purshotam Vithaldas & Co.	Crown ..	8,00,000	41,768	968
Raghavji Maganlal & Co.	Presidency ..	12,00,000	32,624	840
Ramnarain Hurnandrai & Sons	Phœnix ...	8,00,000	52,500	696
Tillockchand Kalyanmal & Co.	Planet	15,00,000	31,586	929
Waljee Shamjee & Co. ...	Jam Manfg. ..	12,00,000	30,570	874
	Carried over ..	3,33,45,000	787,180	14,590

Hindu Mill Agents—*contd.*

PRIVATE CONCERNS.

Owners.	*Mills.*	*Paid-up Capital.* Rs.	*Spindles.*	*Looms.*
	Brought forward ..	3,33,45,000	787,180	14,590
Mafatlal Gagalbhai (Lessee.)	New Islam	....	19,652	560
Raja Bahadur Govindlal Shivlal Motilal ..	Motilal Pitty Mills	....	18,908	*Nil*
Weljee Dharamsey & Co.	Weljee Dharamsey	....	6,000	*Nil*
	Total, 19 Mills ..	**3,33,45,000**	**831,740**	**15,150**

Mahomedan Mill Agents.

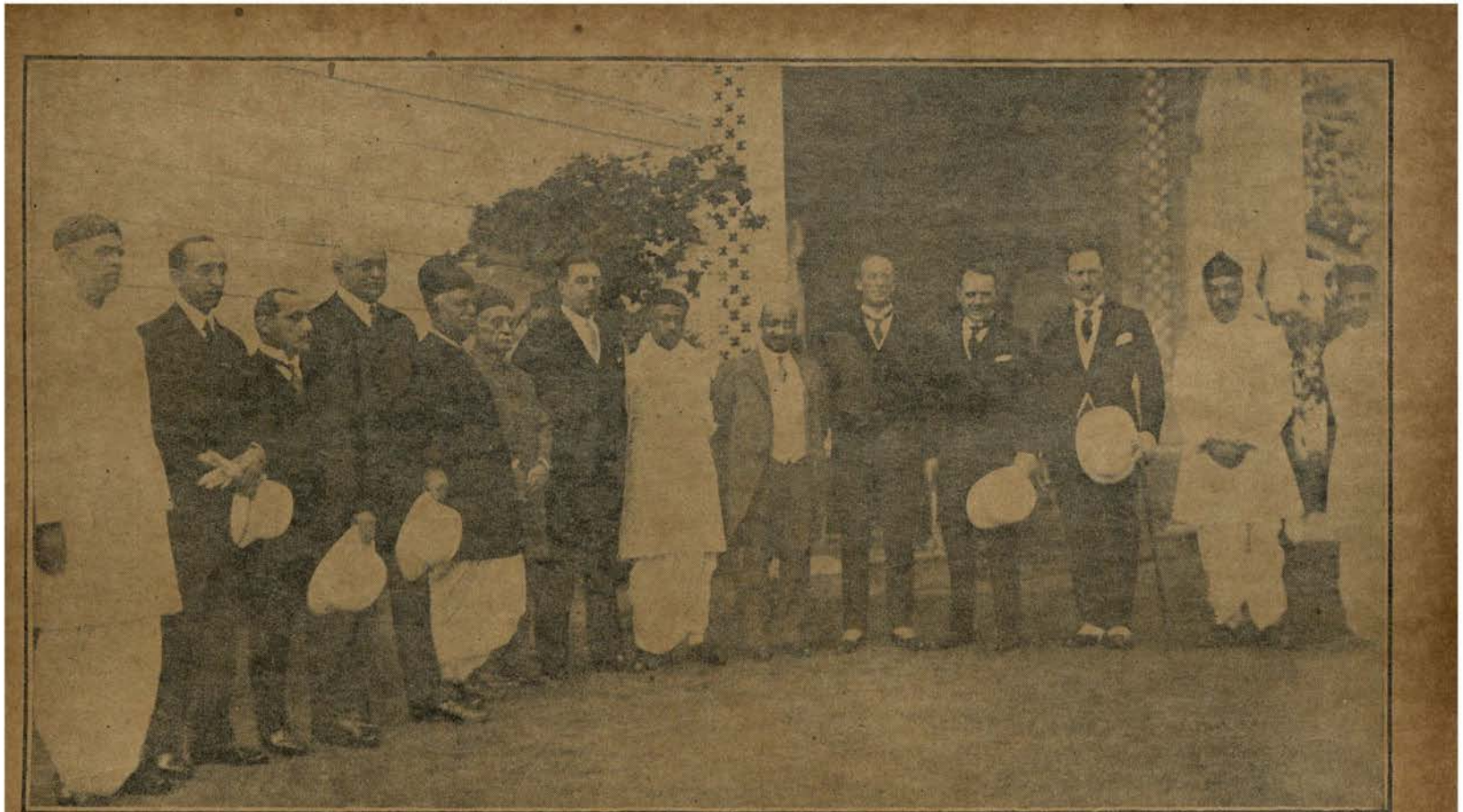
The MAHOMEDANS, who now stand fourth on the list with 587,650 spindles and 10,810 looms, showed little enterprise until the firm of Sir Currimbhoy Ebrahim, the First Baronet, entered the field in 1888 with the Currimbhoy Mills. Factory after factory has since been started or taken over by this enterprising house which now controls 12 mills with 509,458 spindles and 9,744 looms, the largest number in India under a single Agency next to Messrs. E. D. Sassoon & Co., Ltd., whose total is slightly in excess.

Agents.	*Mills.*	*Paid-up Capital.* Rs.	*Spindles.*	*Looms.*
Allana Rahimtula & Co..	Birla No. 1 ..	60,98,800	19,986	*Nil*
	,, ,, 2 ..		25,592	400
Abdoolabhoy Joomabhoy Laljee & Co.	Jivraj Baloo ..	11,00,000	33,516	663
Currimbhoy Ebrahim & Sons, Ltd.	Bradbury ..	24,85,000	35,884	662
	Crescent ..	15,00,000	44,688	1,954
	Currimbhoy ..	22,00,000	39,120	..
	Mahomedbhoy ..		47,684	1,050
	Ebrahim Pabaney	20,00,000	57,880	1,054
	Fazulbhoy ..	18,00,000	52,256	1,268
	Premier ..	19,97,880	15,260	472
	Pearl ..	19,97,000	49,356	1,760
	Kastoorchand ..	47,74,750	32,794	913
	Imperial ..		46,620	*Nil*
	Mathradas ..	24,00,000	43,596	907
	Madhorao Scindia	38,00,000	44,320	604
	Total, 12 Mills..	2,49,54,630	509,458	9,744
	Total, 15 Mills..	**3,21,53,430**	**587,650**	**10,810**

Jewish Mill Agents.

In the JEWISH community only three firms have interested themselves in mill building and now control 14 factories with 652,000 spindles and 13,500 looms. Messrs. E. D. Sassoon & Co., Ltd., head the list with 11 factories containing 513,850 spindles and 11,400 looms. The first five factories in the E. D. Sassoon United Mills group were proprietary concerns until 1920, the Manchester Mill being added in 1925.

Agents.	*Mills.*	*Paid-up Capital.* Rs.	*Spindles.*	*Looms.*
Sassoon J. David & Co., Ltd.	Dawn	8,00,000	39,816	*Nil*
David Sassoon & Co., Ltd.	Sassoon	22,50,000	60,240	1,222
	Union	5,00,000	38,176	866
	Total, 2 Mills..	27,50,000	98,416	2,088
E. D. Sassoon & Co., Ltd.	Apollo	25,00,000	39,654	896
	David	24,00,000	82,626	1,130
	Edward Sassoon..	17,00,000	45,408	868
	Elphinstone	50,00,000	49,064	764
	Meyer Sassoon	10,00,000	42,312	1,012
		1,26,00,000	259,064	4,670
	E. D. Sassoon United Mills:—			
	Alexandra	6,00,00,000	37,120	800
	E. D. Sassoon		90,026	840
	Jacob Sassoon		100,832	2,220
	Rachel Sassoon		*Nil.*	2,020
	Turkey Red Dye Works		1,360	*Nil*
	Manchester Mills.		25,444	850
		6,00,00,000	254,786	6,730
	Total, 11 Mills..	7,26,00,000	513,850	11,400
	Total, 14 Mills..	**7,61,50,000**	**652,000**	**13,500**



A REPRESENTATIVE GROUP OF BOMBAY MILL AGENTS, 1925. [*Photo : "The Indian Daily Mail."*

From Left to Right :—Mr. Lalji Naranjee, Mr. H. P. Mody, Mr. S. D. Saklatwala, Mr. N. B. Saklatwala, C.I.E., The Hon. Mr. Manmohandas Ramji, The Hon. Sir Dinshaw Wacha, Kt., Mr. A. Geddis, Mr. Chamanlal Parekh, Mr. J. B. Petit, Mr. F. F. Stileman, Mr. J. A. Kay, Mr. H. H. Sawyer and Mr. Madhowji D. Thackersey.

European Mill Agents.

Until Messrs. Killick, Nixon & Co. started the Kohinoor Mills in 1907, Messrs. Greaves, Cotton & Co. were the only British firm that had ventured on mill flotation in Bombay. The eight factories under their control contained 283,000 spindles, the largest number that was started in those days in India under one management. There was, however, not a single loom so that the stoppage of the yarn trade with China and the general depression in the industry in 1915 necessitated the transfer of the agencies in four of the factories.

We have now five English firms in Bombay who are Agents for 11 factories containing 421,500 spindles and 8,160 looms, of which 5 factories are under the Agency of Messrs. W. H. Brady & Co., Ltd., containing 166,052 spindles and 2,321 looms, or nearly 40% of the spinning power of the total of the European Agencies.

Agents.	*Mills.*	*Paid-up Capital.* Rs.	*Spindles.*	*Looms.*
Allen Bros. & Co. (India), Ltd.	Simplex	.. 22,50,000	37,208	1,230
Turner, Morrison & Co., Ld.	Globe	.. 10,00,000	29,104	744
Killick, Nixon & Co., Ltd.	Kohinoor	.. 20,00,000	68,996	1,394
James Finlay & Co., Ltd.	Gold Mohur	.. 30,62,450	42,472	1,040
	Finlay	.. 20,00,000	46,072	812
	Swan ..	.. 10,00,000	31,616	608
	Total, 3 Mills	.. 60,62,450	120,160	2,452
W. H. Brady & Co., Ltd.	Colaba Land .. Jehangir Wadia ..	28,00,000	44,792	697
	New City of Bombay ..	6,00,000	47,160	*Nil.*
	Bombay Industrial	19,98,750	24,432	566
	New Great Eastern.	23,00,000	49,668	1,058
	Total, 5 Mills ..	76,98,750	166,052	2,321
	Total, 11 Mills ..	**1,90,11,200**	**421,500**	**8,160**

Remuneration of Managing Agents.

Commission on Production.

When Mr. Cawosji Nanabhoy Daver started the first cotton mill in Bombay in 1854, he based his remuneration on the production of yarn. Ring spinning was undreamt of at the time, and the mule and fly throstle in use yielded less than one-third the present-day outturn. These and other circumstances enabled Mr. Daver to charge a quarter anna commission on every pound of yarn produced irrespective of dividends. The annual remuneration on this basis amounted to a few thousand rupees, and compared with the high profits it did not appear unreasonable. The Oriental, the Manekji Petit, the Bombay United and other mills which followed adopted this method, which was continued for many years without any objection from investors.

Protests were however raised in later years when, despite declining profits and mismanagement, the Agents insisted on their pound of flesh without an adequate margin for shareholders. One of the mills was shewn to have yielded a gross annual profit of Rs. 2,00,000, of which the Agents took Rs. 76,000 as commission. The next few years the commission remained about the same, but the amount available for dividend dwindled to Rs. 30,000. During a skirmish that followed at the shareholders' meeting it was shewn that in ten years the Agents earned more than the value of the mill and all this time they held only the bare qualification shares, while the company had been defraying the expenses of a well-paid staff, who were mainly responsible for the profits. The remuneration of the Agents was out of all proportion to their personal qualification, financial risk, and the work put in by them. There was, however, the agency agreement, and in the end the concern was wound up and purchased by the Agents themselves.

Commission on Profits.

Instances of this nature kept away investors, and the commission on outturn began to be looked upon with disfavour. Meantime, with the advent of the Ring Frame, the output per spindle was nearly doubled, and in 1886 Messrs. Greaves, Cotton & Co., who were the first to introduce the new machine in Bombay on a commercial scale, struck a new departure by projecting a spinning mill on the basis of a commission of 10 per cent. on profits which had been originally adopted by Mr. Jamsetji Tata at the Empress Mills at Nagpur. This was received favourably by the public, and their example was followed especially by new companies projected under Parsi and European management, and subsequently the system of commission on profits found general favour and has been adopted by the majority of mill agents.

About 17 companies have, however, continued on the quarter-anna system, and several of them have given good returns to the shareholders despite the commission on production. So long as the mills were managed efficiently and with due regard for the rights of shareholders and their dividends this latter arrangement has not proved particularly objectionable. In fact, it has been advantageous to the shareholders during periods of large profits as the remuneration of the Agents on production was less than on the profit basis, and an investigation into the two systems of remuneration shows that except in rare cases the commission on production is not so detrimental to the interest of the mill industry as has been generally made out. In the first place the quarter-anna commission has been waived voluntarily by several mill Agents when working of the factories did not result in profit. In other cases the commission though on production has been arranged on a sliding scale in proportion to the profits. For instance, the Agents of the Moon Mill, one of the best managed concerns in Bombay, are entitled to a commission of a pie per pound of yarn or cloth produced, when the mill has not yielded any profit. The Birla Mills and a few other concerns have more or less a similar arrangement and it has consequently been contended by mill Agents, who are paid on production on the sliding scale, that their minimum or certain remuneration is less compared with Rs. 24,000 to Rs. 36,000 usually paid during years of loss to Agents entitled to 10 per cent. on profits. On the other hand, there are mills which pay a salary or allowance of Rs. 15,000 to Rs. 30,000 per annum to the Agents in addition to the minimum commission on production.

It will be seen from the figures of remuneration under both systems which are published on pages 64 and 65 that on the whole the commission on production is not considerably in excess of the commission on profits though there are stray instances of exorbitant commissions having been taken on production even during years of trade depression and heavy losses.

Commission on Production *vs.* Profits.

In the boom years 1920 and 1921, the commission on production varied as under in different concerns compared with the commission of 10 per cent. on profits :—

The Alliance Mills made a net profit of Rs. 5,00,000 in 1920 and paid Rs. 72,000 as commission on production which would have amounted to Rs. 50,000 on the 10 per cent. profit basis. On the other hand the profits of the Crown Mills came to Rs. 14,70,000 in 1920, but the commission on production amounted to Rs. 39,000 only as against Rs. 1,47,000 on profits.

The Moon Mills earned Rs. 21,00,000 in 1920 and paid Rs. 65,700 as commission on production instead of Rs. 2,10,000 on profits; in 1921 the profits amounted to Rs. 10,84,000 and the commission to Rs. 82,000, whereas it would have been Rs. 1,08,400 on profits.

The Presidency Mills' profits amounted to Rs. 8,60,000 in 1921 but the commission came to Rs. 44,000 only against Rs. 86,000 on profits.

The Sassoon Mills earned Rs. 14,00,000 in 1920, which on the profit basis, would have brought the Agents Rs. 1,40,000 at 10 per cent.; they, however, received Rs. 42,000 only on production. On the other hand, the Union Mills, under the same Agency, paid in 1920 a commission of Rs. 1,21,500 on production against Rs. 98,500 which would have been on the profit of Rs. 9,85,000.

The Agents of the Framji Petit Mills received only Rs. 44,000 on production on a profit of Rs. 8,66,000 in 1921 whereas at 10 per cent. it would have amounted to Rs. 86,600.

The Jivraj Baloo Mills earned Rs. 3,00,000 in 1920, but paid Rs. 53,800 as commission on production which would have amounted to Rs. 30,000 on the profit scale.

Commission Paid on Production in 1924.

Mills.	Profits.	Loss.	Commission.	Remarks.
	Rs.	Rs.	Rs.	
Alliance	*Nil.*	3,48,970	65,000	Given up.
Birla Nos. 1 & 2	*Nil.*	4,25,500	17,000	
Crown	1,87,000	*Nil.*	51,500	
Diamond	*Nil.*	1,20,000	36,000	
Emperor Edward	*Nil.*	1,80,000	61,400	
Framji Petit	*Nil.*	3,43,000	5,800	
Jam	2,68,000	*Nil.*	39,570	
Jivraj Balloo	*Nil.*	6,27,500	41,700	
Jubilee	*Nil.*	2,30,000	*Nil.*	Given up.
Manockjee Petit— (Dinshaw Petit) (Bomanji Petit)	*Nil.*	4,37,000	4,38,000	
Morarji Goculdas	4,21,000	*Nil.*	48,300	
Moon	65,000	*Nil.*	61,000	
New China	*Nil.*	7,100	24,000	
Presidency	*Nil.*	2,77,000	23,000	Given up.
Sassoon	*Nil.*	7,10,000	21,400	
Union	*Nil.*	6,60,000	12,000	
Victoria	4,100	*Nil.*	62,000	Given up.

Commission on Profits and Minimum Remuneration Paid in 1924.

Mills.	Profits. Rs.	Loss. Rs.	Commission. Rs.	Remarks.
Apollo	*Nil.*	1,07,000	24,000*	
Assur	*Nil.*	9,67,000	32,000*	Given up Rs. 24,50
Bombay Cotton	1,23,500	*Nil.*	21,800	
Bombay Dyeing— (Textile and Spring)	*Nil.*	1,46,000	1,33,000*	
Bombay Industrial	*Nil.*	5,14,500	36,000*	
Bradbury	1,44,000	*Nil.*	16,000*	
Century and Zenith	*Nil.*	4,61,000	72,000*	
Colaba Land	33,700	*Nil.*	4,400	
Coorla	2,81,400	*Nil.*	30,000	
Crescent	2,25,700	*Nil.*	25,000	
Currimbhoy	*Nil.*	2,43,000	40,000*	
David	*Nil.*	1,87,000	12,000*	Given up.
Dawn	1,84,400	*Nil.*	21,800	
Ebrahim Pabaney	2,44,000	*Nil.*	36,000	
E. D. Sassoon United	*Nil.*	9,47,800	1,20,000*	Given up.
Edward Sassoon	*Nil.*	1,47,000	36,000*	Given up.
Elphinstone	1,99,000	*Nil.*	22,000	
Fazulbhoy	4,02,000	*Nil.*	43,000	
Finlay	3,97,000	*Nil.*	36,000	
Globe	*Nil.*	3,92,700	*Nil.*	
Gold Mohur	*Nil.*	7,81,000	16,000*	
Hindustan	2,69,800	*Nil.*	48,000	
Indian Manufacturing	2,51,000	*Nil.*	48,000	
Jamshed	*Nil.*	2,03,700	20,000*	Given up.
Kastoorchand	*Nil.*	2,90,000	*Nil.*	
Khatau	99,000	*Nil.*	30,000	Given up.
Kilachand	*Nil.*	56,700	18,000*	
Kohinoor	90,300	*Nil.*	12,000	
Madhorao Scindia	*Nil.*	4,42,000	*Nil.*	
Madhavji Dharamsey	1,79,000	*Nil.*	35,000	
Mathradas	*Nil.*	*Nil.*	*Nil.*	
Meyer Sassoon	*Nil.*	71,000	*Nil.*	
New City	*Nil.*	33,000	*Nil.*	
New Great Eastern	1,91,000	*Nil.*	26,000	
New Kaiser-i-Hind	2,73,600	*Nil.*	30,400	
Pearl	2,45,000	*Nil.*	36,000	
Phœnix	2,99,000	*Nil.*	33,200	
Planet	*Nil.*	4,93,000	18,000*	
Premier	75,000	*Nil.*	36,000	
Ruby	*Nil.*	1,22,000	*Nil.*	
Simplex	*Nil.*	93,000	15,000*	
Sir Shapurji Broacha	*Nil.*	1,58,000	48,000*	Given up.
Standard	1,90,700	*Nil.*	54,500	
Swadeshi	10,37,000	*Nil.*	1,21,300	
Swan	2,84,000	*Nil.*	31,500	
Tata	*Nil.*	12,77,300	*Nil.*	
Western India	*Nil.*	58,700	30,000*	Given up.

* The Asterisks indicate the minimum amount payable to the Agents for their services during the year of loss.

Financial Postition and Trade Prospects.

THE figures of profit and loss of the cotton mills from 1920 to 1924 with reserve funds, block value, machinery equipment, etc., which are printed on pages 75 to 243, have been specially compiled for this publication. These together with the following abstracts from the Reports of the Millowners' Association should give the reader a comprehensive idea of the position and prospects of the mill industry in Bombay.

General Position from 1920 to 1924.

1920. The year ending 31st December, 1920, was as prosperous for the industry as 1919. As the year 1919 was a record one it follows that we had two years of record prosperity in succession. Unfortunately, signs are not wanting that 1921 will see a considerable decline in the profits of the industry.

JAPANESE COMPETITION.

One salient trade fact must be referred to before the survey of the year 1920 is terminated—the dumping of Japanese yarn and cloth into Bombay. Large quantities of such Japanese goods have arrived and are sold at any price to clear. With enhanced income-tax, super-tax and imposition of duties on machinery and stores, the time has surely come for Government to interfere and put a stop to this unfair and cut-throat competition, and it is hoped that the era so auspiciously inaugurated by H.R.H. the Duke of Connaught may see its speedy termination by future budgets being solely compassed in Indian interests.

1921. The year ended 31st December 1921 has been a year of good profits like its predecessor, though the level reached in 1919 and 1920 was not maintained. Considering the depression in trade all over the world and the condition of the cotton mill industry outside India, it is a matter of congratulation that our industry passed through the year without being appreciably affected by the world conditions. This was in some measure due to the recrudescence of the "Swadeshi" movement which kept the demand for Indian-made cloths and yarns at a fairly high level and at remunerative rates.

1922. The year ended 31st December 1922 was a year of fairly good profits, though much below the level reached in the preceding year. It is to be feared that the cycle of prosperity for the mill industry which was ushered in by the war and sustained by the "Swadeshi" movement is nearly, if not definitely, ended, and the industry has now to adjust itself to existing conditions.

1923. As was anticipated in the last report, the year 1923 has not been a favourable one for the mill industry, and if the conditions prevailing at the end of the year do not materially improve, it appears that the industry must prepare itself to pass through still more critical times.

1924. Although the year 1923 was far from prosperous as far as the cotton textile trade was concerned, it was anticipated that the year 1924 would, if anything, be still more adverse. This unfortunately proved true and during the year we witnessed a further curtailment of the narrow margin of profit of the preceding year. The industry during the year passed through an exceedingly trying time.

The Cotton Market from 1920 to 1924.

1920. In the Cotton Market, Broach opened at the beginning of the year at Rs. 550 and gradually, owing to the accumulation of stocks and other circumstances, sagged away to Rs. 300 by the end of the year. The exchange factor whilst inconveniencing importers has to a very great extent saved the Indian raw cotton market, as despite the record prices of Americans of 32.41*d.* and Egyptians of 99*d.* the Indian market failed to respond, and as Americans fell in value and the value of the rupee gave way Indian cotton remained more or less steady and the decline was only gradual and trade remained healthy and prosperous throughout the whole period. The stocks at the end of the season were large, being upwards of 14 lakhs of bales. Unfortunately, owing to the drop in exchange and the failure of the monsoon and consequent partial cessation of exports and, further, the inability of the enemy countries to absorb and pay for their usual supplies, the end of the year has seen a rapid and disquieting drop in prices. This drop is more marked in American cotton than in Indian, but it looks as if the turn of Indian cotton has also now arrived owing to the want of demand for yarn and cloth throughout the world, and particularly to the large stocks of piece-goods ordered and imported into Bombay for which there appears to be very little demand.

1921. The year opened at about Rs. 290 for Broach and for a while looked fairly steady, at one time reaching Rs. 349. However, about the end of February, certain very heavy Bear sales caused the market to collapse and at one time there was no buyer to be found for Broach at as low a figure as Rs. 200 nor for Oomras at Rs. 185. Subsequently a good demand for yarn and piece-goods developed, and with it a demand for cotton both from Japan and the local mills, with the result that by the end of May prices were back to Rs. 345 for Broach and Rs. 300 for Oomras. On a break in the rains here and bullish news from America, speculators kept buying heavily. The continued receipt of panicky news from America caused large orders to come in from Japan and made the Bulls still bolder. They then turned their attention to the new crop futures, and helped by the rise in New York and Liverpool they were able to put up Broach to Rs. 628 in the first week of October. This was the highest point of the year. New York then gradually fell away and by the end of October prices had declined, and in sympathy rates for Broach were Rs. 500 and were as low as Rs. 410 by the middle of the following month. A difficulty then arose, as the Bulls had enormous differences to pay out, and taking advantage of the fact that their contracts had been made under the Cotton Contracts Board which had ceased to function, they refused to pay in their differences at the settlement, claiming that they were not bound to do so and would pay for the cotton whenever tendered. The trade had consequently to approach Government with a view to avert a crisis; the Cotton Contracts Board was reinstated and things became normal again. The situation was very much helped by a good rise in America, and the year closed with Broach at Rs. 525 April-May delivery and Oomras at Rs. 470 January delivery.

1922. The year opened with April-May Broach at Rs. 522 and January Oomra at Rs. 464, but with weaker advices from New York and the failure of the Syndicate cornering the Oomra contracts the prices gradually declined till on the 8th February Broach stood at Rs. 400 and Oomra at Rs. 331. By the end of the month Broach had recovered to Rs. 440, only to decline by about Rs. 50 early in March. However, on firmer advices from New York, Broach and Oomra rose rapidly to Rs. 485 and Rs. 410 respectively on the 10th April. From then onwards the tone of the bazaar was distinctly bullish and with New York

passing 23 cents in July prices here on the 15th of that month were Rs. 548 and Rs. 472. Transactions in new crop (1923) were then started at about Rs. 521 for April-May Broach and Rs. 461 for December-January Oomra.

The subsequent period saw attempted corners in both the Broach July-August and Oomra September contracts—the latter on a somewhat gigantic scale—with serious consequences to the cornerers in both cases, as they had not sufficiently appreciated the power wielded by the East India Cotton Association. The failure of the September corner meant an immediate heavy decline in prices. These were Rs. 406 and Rs. 348 at the end of September when Americans were as high as 20½ cents (a level at which earlier in the year the local prices were Rs. 525 and Rs. 448 respectively), and exporters operated the market with advantage. However, the effects of the corner spent themselves in due course, and in sympathy with New York at 26 cents, Broach and Oomra reached Rs. 499 and Rs. 445. The year closed with the prices at Rs. 486 and Rs. 436 against New York's 26.50 cents. These same prices had prevailed in the previous April when New York was 18 cents, and the decline must be attributed to the great shaking the bazaar had had in the two corners. On the other hand, owing to the carry-over of the previous year having been liquidated, the year closed with nearly normal stocks, and the shortage of American supplies promised firmer rates for Indian cotton in the succeeding year.

1923. The year opened with March New York at 26.55 cents and April/May Broach at Rs. 482. Prices showed an advancing tendency, touching in the beginning of March 31.27 cents and Rs. 575 respectively. A sharp decline followed and at the end of the same month Broach went down to Rs. 503. During the next two months the position remained uncertain, but ultimately with the talk of a big acreage in America and favourable weather, American, early in August, declined to about 22 cents for October delivery. The local market being for old cotton kept comparatively steadier and ultimately closed at Rs. 490 for July/August, while New Broach for April/May 1924 was quoted at about Rs. 450.

Later a sudden reversal of feeling occurred in America based on reports of unfavourable weather and this was succeeded by a series of unfavourable happenings throughout the rest of the season, the worst part coming after the final Bureau Report in October with the result that by the beginning of December, January Futures in New York were quoted at 36.45, a jump of 15 cents from the level reached six months earlier. This led to enormous orders from Lancashire and the Continent for good Indian cotton and prices here first rose slowly to Rs. 600 and then very rapidly to near Rs. 700. Owing to favourable reports concerning the Indian crop, there was an inclination to sell at anything over Rs. 550. There were consequently very heavy sales by the bazaar and as with every advance in price immense amounts had to be found at the fortnightly settlements, the resources of the bazaar were strained almost to breaking point. For a few days the situation was critical and the Board of the East India Cotton Association agreed to extend the time for the last November settlement and ordered that settlement might be carried out on the basis of Rs. 650. Later on a suspension of all new business up to 31st December was ordered. About the middle of December there was a sudden break in New York to under 33 cents, the position gradually eased and what at one time appeared to be the beginning of a very serious crisis in the trade was averted. The year closed with New York at 35.60 cents for March, and Broach at Rs. 662 for April/May.

1924. The Market opened in January with Broach April/May at Rs. 658, New York May being quoted at 35.80. The rate declined steadily on free arrivals

from up-country and settled round about Rs. 550 throughout March, and rising again in April and May until the old 1924 contracts closed finally at Rs. 595 for Broach and Rs. 557 for Oomras. Business for forward months in both Broach and Oomras had, however, temporarily to be stopped for fear of a corner owing to scarcity of these styles. The new contracts for April/May 1923 opened at Rs. 513 and this price rose steadily until it reached Rs. 542 at the end of May, falling in July to Rs. 490, from which point it rose again to Rs. 540 at the end of the month. The next two months, August and September, registered another heavy decline in the new crop prices, but in the last three months the market appeared to have settled down both here and in America, Broach remaining steady around Rs. 455, and New York around 25.00. Although the crops in both the countries were expected to be fairly large, untimely rains in Berar and Khandeish damaged the quality and also partly affected the quantity of the crops there, and the Oomra contracts was, in consequence, at a very small discount compared to Broach.

Japanese Shippers.

Japanese shippers showed very little activity during the last month or two of 1924 and European shippers were practically out of the market owing to the small disparity between Indian and American prices. Punjab/American cotton which last year commanded a premium of Rs. 150 over Broach, in December was fetching only Rs. 50 more, owing to absence of Liverpool enquiry on account of deterioration in quality. Neither was the demand from local mills active, as owing to the constant fall in cloth prices, the mills generally preferred to cover their requirements from hand to mouth.

The Yarn Market from 1920 to 1924.

1920. As regards yarn the demand exceeded the supply during the year and spinning mills had an exceedingly profitable year. In fact, the margins were more profitable than in weaving mills. Spinning mills were also able to sell their production for many months ahead, thereby assuring profits.

1921. In consequence of the poor tone in cotton and unfavourable advices from China, the Yarn Market opened inactive with prices at 13 annas for medium, and 14-14½ annas for superier, 10s. From this figure it kept declining until the end of March when medium 10s touched 8½-8¾ annas, the lowest rate of the year. In April-May the tone became much better, in sympathy with cotton, and by the end of June the rate had improved to about 12 annas. Encouraged by the strong tone of the cotton market the up-country markets also became good buyers and the tone of yarn continued good on the whole till the end of September when certain favourite chops of 10s and 12s realised over 5½ and 16½ annas respectively. With the decline of the fever in cotton the demand for yarn also fell off and the market was about 1-1½ annas from the top when the year closed, with stocks tending to accumulate in the hands of the mills and the export merchants.

The Yarn Trade with China.

A noteworthy feature of our yarn trade with China during 1921 was the almost total disappearance of Shanghai and North China as buyers of Indian spinnings. The spread of the mill industry in China itself—mostly in and near Shanghai—and the competition of Japan in the lower counts, a thing unknown in pre-war days, resulted in our yarns being practically ousted from the Northern China markets. Hongkong and South China seem to be the mainstay of those mills that depend on the export trade.

1922. In yarns the year opened with 14½ annas and 15 annas per lb. for superior 10s and 12s, mediums being ½ to 1 anna lower. Prices then sagged till in April 10s superior was at 12¼ annas. Owing to some demand both for export and from the interior, prices steadied to about 13 annas for superior and 12 annas for medium 10s during July. Thereafter there was a more or less continuous decline in spite of the strong rally in cotton, and at the close of the year prices were about 11¾ annas for superior 10s and 12¼ annas for medium 12s.

The trade had been disappointing throughout and there was never that keenness for ready goods that had made itself so noticeable in previous years. The reports of Chinese mills contemplating shutting down or going on short-time indicated an over-supply even in that direction. The demand for Indian yarns of 20s and higher counts has been considerably affected by the import of cheap Japanese yarns. So far as the mills here are concerned, the year under report was remarkable for the fact that yarns failed to respond as usual to the rise in cotton, with the result that day by day the mills' margin of profit grew increasingly less till it almost reached vanishing point when the year closed, and as goods were difficult to move even at low prices there was a general accumulation of stocks.

1923. In the yarn trade, too, the year was for the greater part extremely disappointing. Ordinary 10s were quoted round 11 annas in the beginning of the year but the big rise in cotton in the early part of the year had very little effect on yarn prices as the demand kept very poor and stocks accumulated. About the middle of September the shortage created by the disaster in Japan began to make itself felt and there was brisker enquiry and some rise in prices. Later on as cotton advanced by leaps and bounds up-country dealers began to have increasing confidence and commenced buying on a large scale. This practically cleared the market of all accumulated stocks by the middle of September. Prices at the close of the year were about 14½ annas to 15 annas for ordinary 10s and about ¾ annas higher for 12s with moderate business and a good undertone.

1924. As regards yarns, the year was very unsatisfactory. The opening prices in January for 6s, 10s and 40s were 14½, 16½ and 23¼ annas respectively. These rates fell steadily, with the exception of a slight spurt in March and April, until at the end of the year they were quoted about 2 annas less per lb. for 6s and 10s. As regards 40s, chiefly owing to the competition of European and Japanese yarns which could be sold much cheaper owing to their depreciated exchanges, the price went down by no less than 5 annas per lb. The demand was very slack, and the margin at times was so low as to make it impossible for the mills to turn out yarns at any profit.

During the months of August, September and October, production was very severely affected by absenteeism due to sickness, and at times during this period, in certain mills a considerable percentage of spindles and looms had to remain idle.

The Cloth Trade from 1920 to 1924.

1920. In cloth the demand was sustained throughout the year and prices varied from Rs. 2-0-0 to Rs. 1-10-0. The clearances were good and the year ended with very light stocks held by the mills either on their own account or on those of their buyers. The prospects of the current year are however far from bright. The world decline in prices must affect in the long run the price of the Indian cloth. The saving feature, however, is the great drop in exchange which is about half of

what it was in January 1920, with the result that when present stocks are absorbed imports of cloth are bound to be very light and there will be a tendency for country manufactured cloth to replace the imported article. The export of Indian cloth has dropped away and almost ceased. During the war Africa took a considerable number of bales of blankets and Zanzibar cloth, but with the resumption of work in Europe the demand for these cloths has disappeared.

1921. In the cloth trade there were no violent fluctuations in rates during the year. Grey longcloth was at Rs. 1-12-0 per lb. at the beginning of 1921. In sympathy with cotton and yarn the rate began to decline until it touched Rs. 1-7-0 in March, the lowest point reached in the year. Thereafter conditions improved and the price went on rising until it again reached Rs. 1-12-0 at which level it remained throughout October and the first half of November. At the close of the year longcloth stood at Rs. 1-10-0.

The year under report saw the old "Swadeshi" movement galvanised into life. The cult of Khadi was responsible for causing a big demand for this coarser kind of cloth from about the month of April. By August the demand had so much increased that the rates rose from 13-14 annas to Rs. 1-2-0 per lb. This movement had, however, a very adverse effect on the sale of unbleached fancy goods which are usually in demand from about the month of August to the end of the cold season. Bleached fancy goods were also affected, though not to the same extent.

1922. In the cloth trade the year opened with longcloth at about Rs. 1-10-0 per lb. and this price remained practically stationary till in March, when owing to a good demand, it rose to Rs. 1-11-0. The demand continued for the next two months, but in June there was a falling off. July showed an increase of about half an anna, but the demand was not active. The market remained stagnant for a month or two, and from September the rates steadily declined. At Diwali the rate was about Rs. 1-8-0, but there were no forward sales of note. In the last week of November and in December the rate further declined to Rs. 1-6-0, but no big business was done, as the mills were unwilling to sell and the merchants were unwilling to offer high rates.

For unbleached fancy cloth there was a fairly good demand from September to November at reduced rates. Khadi was in demand all the year round, but the rates gradually declined from 17½ annas (for coarse Khadi) at the beginning of the year to 15 annas at the end.

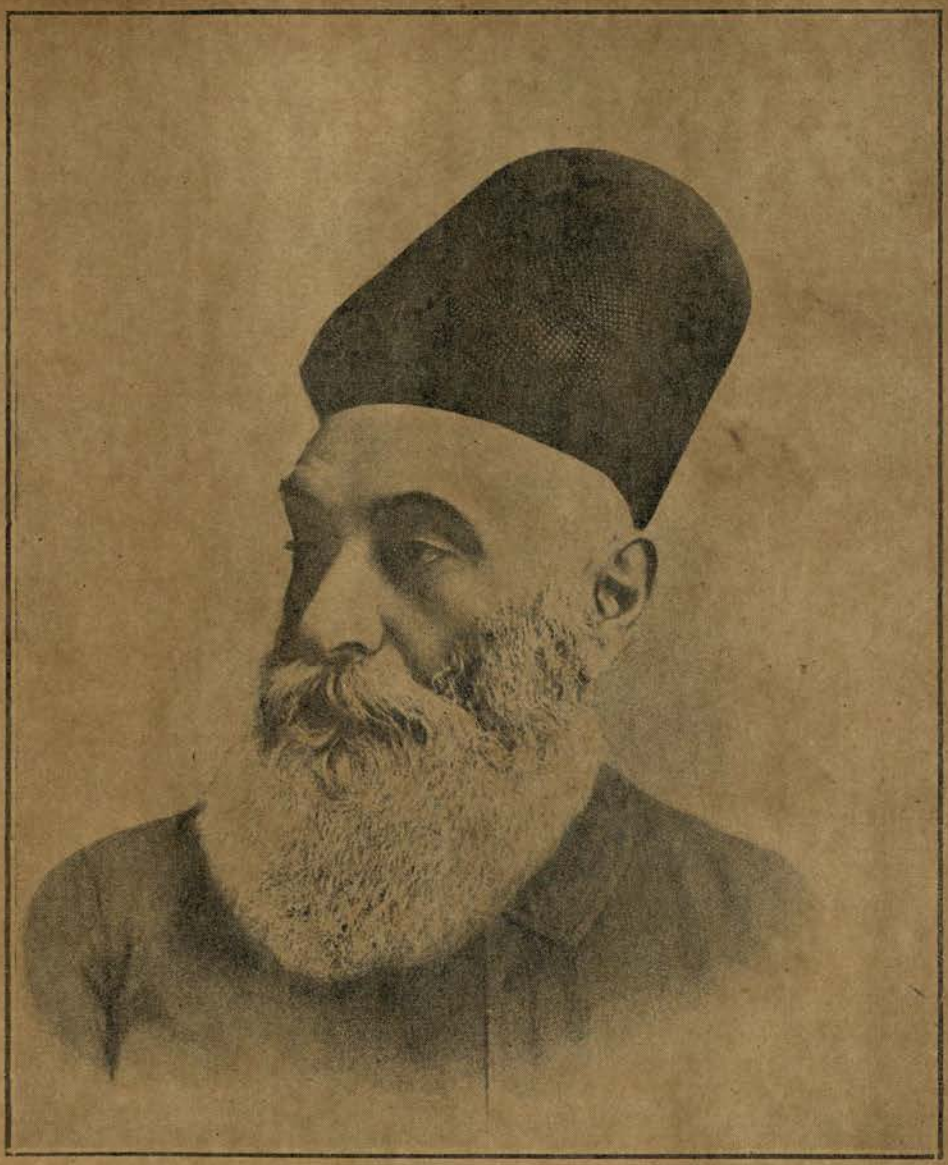
Increased Imports of Manchester Goods.

The depression in the cloth trade has been due to various causes, chief of them being the slackening of the "Swadeshi" movement, the increased business in Manchester goods which could be placed in the market at prices lower than those of corresponding Indian goods, the curtailment of exports to Western Asia owing to the unsettled political situation there, the financial difficulties of big merchants who had made losses owing to the steady decline in prices, and the unwillingness of some large millowners to realise this downward tendency, which made them withhold selling from time to time at prevailing rates. The fear that these goods might be ultimately dumped on the market at lower prices had a restraining influence on the buyers.

1923. The year under report was marked by spasmodic fluctuations in the prices of both the raw material and the finished article making the outlook for the mills at times very uncertain. While at one period cotton rates seemed to favour the mills, there was an absolute cessation of demand for cloth, and when enquiries for cloth were forthcoming, the prices of cotton ruled so high as not only to leave no margin, but to involve a positive loss to the manufacturer. The depression in the cloth market, which was noticeable at the end of the previous year, continued for a long time into the year under report, necessitating a steady fall in rates. Thus the price for standard longcloth which was Rs. 1-7-0 per lb. in January had to be gradually brought down to Rs. 1-4-0 in August. Stocks also began gradually to accumulate and month after month passed by, without any reappearance of the demand—always expected and always put off. The position became so serious that in April the Association thought it necessary to call for returns from the members showing the stocks held by them with a view to consider the advisability of curtailing production. Fortunately the actual stock position thus revealed did not call for any drastic measures to be taken immediately. The increase in stocks was temporarily checked by the long-continued strike of the mill hands in Ahmedabad. About the second half of August there was a temporary spurt which enabled some of the mills that benefited by it to get rid of a part of their accumulated stocks, but it was not till the end of October that there was a general and continuous demand. This continued till about the middle of November and enabled the mills in general to clear old stocks and effect forward sales at increasing rates, the nett effect being that standard longcloth was again quoted at Rs. 1-8-0 per lb. This state of affairs lasted till about the middle of December since when there has been again a marked falling off in both the retail and wholesale demand. This is to be attributed mainly to the excessively high price of Indian cotton, in sympathy with American, and the consequent hesitation on the part of merchants and middlemen to commit themselves at the present level lest a sudden fall in the raw material should send down the cloth market precipitately, and also the great stringency in the money market which has made itself felt earlier than usual. The outlook for the mill industry just at present, therefore, is none too bright.

1924. The trade depression noticeable in the previous year continued in the year under report, and there was a steady decline in the price of cloth more or less in sympathy with the decline in the price of cotton. The depression was unrelieved by any of those periodic spurts which characterised the preceding year. Standard longcloth opened in January at Rs. 1-9-0 but owing to the depletion of stocks caused by the strike, this price remained steady till the beginning of June when there was a drop of one anna in the rate. The new level of Rs. 1-8-0 was maintained for about five months, but the price fell to Rs. 1-7-0 at the end of October, and again to Rs. 1-6-0 in the middle of December, and remained at this figure till the end of the year.

The demand for cloth was never very active, as purchasers fought shy of making large commitments owing to the continued fall in prices. At the same time, as the mills showed their readiness to meet the buyers by accepting easier rates, when the cotton market was in their favour, they were able to effect sales from time to time, and stocks consequently never rose to an alarming level. It should, however, be pointed out that throughout the year, the increasing imports of Japanese piece-goods into India had very adverse effects on the home trade. In certain instances the Japanese goods were placed on the market at prices lower than the cost of production of similar goods manufactured in India.



MR. JAMSETJI NUSSERWANJI TATA.

Born 1837. Died 1904.

"Mr. Tata did not claim to be more unselfish, more generous, or more philanthropic than other people. But he did claim that his mills were started on sound and straightforward principles and that he considered the interests of the shareholders as his own and the welfare of his employees as the surest foundation of his prosperity. . . . Faith in himself, faith in the future of his country and faith in education as the best and only means of ensuring that future constituted the crowning conviction of Mr. Tata's career."—*The Indian Textile Journal.*

SIR DORABJI JAMSETJI TATA, KT.

THE PARTNERS IN THE FIRM OF MESSRS. TATA SONS & CO.
The late Mr. J. N. Tata, Mr. R. D. Tata, The late Sir R. J. Tata and Sir D. J. Tata.

SWADESHI MILLS CO., LTD.

(INCLUDES BOMBAY UNITED FROM 1925.)

Started in 1860 as the COORLA MILLS ; became DHARAMSEY POONJABHOY in 1865; went into liquidation five times and was closed in 1886. Restarted as the SWADESHI MILLS in 1887. Purchased the BOMBAY UNITED MILLS in May 1925 from the Tata Mills, Ld.

REGISTERED OFFICE :—24, BRUCE STREET, FORT, BOMBAY.

Telegrams : " SWADESHI, BOMBAY." Phone : 26041.

Directors :
Sir D. J. Tata, Kt.
R. D. Tata.
Narottam Morarji.
J. D. Ghandy.
S. D. Saklatvala.
B. F. Madon.
N. B. Saklatvala, C.I.E. (*Special Director*).

Agents :
Tata Sons, Ltd.

Secretary :
M. N. Kuka.

Auditors :
Sorab S. Engineer & Co.
A. S. Madon & Co.

Solicitors :
Ardeshir Hormusji Dinshaw & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 20,00,000 divided into 20,000 Ordinary Shares of Rs. 100 each. Issued, 20,000 Shares of Rs. 100 each.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital	20,00,000	20,00,000	20,00,000	20,00,000	20,00,000
Debenture ..	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt & Loans	30,47,123	13,61,972	32,61,194	44,56,671	52,35,281
Reserve Funds	92,16,544	1,02,92,499	1,06,17,727	1,08,10,124	1,09,69,862
Depreciation Fund	37,49,165	42,49,465	44,44,065	44,70,765	45,19,417
Land & Building	12,54,468	14,62,817	15,69,985	18,58,625	20,99,133
Plant & Machinery	35,36,437	35,73,838	35,71,474	33,73,659	32,44,737
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	45,09,471	36,41,928	22,44,646	12,42,700	10,36,924
Dividend per Share †	600	550	400	38	34

† Face value of share Rs. 500 up to 1922.

Swadeshi Mills Co., Ltd.—*contd.*

(No. 1 at Kurla. No. 2 at Girgaum.)

Mills : Kurla. **Phone :** 87019.

Spindles : **Ring,** 59,084 **Looms,** 1,542. **Hands,** 3,553.

Yarn Spun : 4s to 60s (occasionally). **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	57,47,663	Electric Energy	1,79,417
Salaries and Wages at Mill	12,44,520 2,01,155	Office Establishment and Allowance	67,305
Stores	4,88,016		
Coal	1,05,228	Agents' Remuneration ..	1,21,25

Mill Staff, Kurla. (*Copyright.*)

Manager ..	.. K. M. Sutaria.	Weaving Master ...	D. S. Aga.
Carding Master	.. F. S. Dastoor.	Mech. Engineer ..	D. P. Mistri.
Spinning Master	.. S. M. Vajifdar.	Elct. Engineer ..	R. N. Dalal.

Mill No. 1, Kurla.

Plant & Machinery.	Suppliers. (*Copyright.*)
Openers and Scutchers ..	Lord Bros.
Cards	Elijah Ashworth.
Draw Frames	Platt Bros.
Roving Frames ..	Do.
Ring Frames	Do. and Brooks & Doxey.
Winding and Warping ..	Do. and Butterworth & Dickinson.
Sizing	John Dugdale & Sons.
Looms	Platt Bros. and Butterworth & Dickinson.
Bleaching and Finishing ..	J. H. Riley & Co.
Dyeing	Gebauer & Littaur.
Humidifiers	Garlands and Hall & Kaye.
Sprinklers	Mather & Platt, Ltd.
Boilers	Daniel Adamson & Sons.
Electric Motors	Metropolitan Vickers Electrical Co.

Mills driven electrically by the Tata Hydro-Electric Power S

Swadeshi Mills Co., Ltd.—*contd.*

(No. 2 Mill.)

Mill : Girgaum. Phone : 21452.

Spindles : Mule, 6,024 / Ring, 39,104 } 45,128. Looms, 1,187. Hands, 2,170.

Yarn Spun : 8½s (occasionally). Cloth : Grey, Bleached and Coloured.

Mill Staff. (*Copyright.*)

Manager ..	K. M. Sutaria.	Weaving Master..	E. B. Dordi.
Carding Master ..	S. R. Jassomoney.	Mech. Engineer ..	P. K. Kavarana.
Spinning ,, ..	D. J. Daruwala.		

Plant & Machinery.	Suppliers. (*Copyright.*)
Openers and Scutchers ..	Platt Bros.
Cards	Howard & Bullough, Platt Brothers and Tweedale & Smalley.
Draw Frames	Do. do. do.
Roving Frames	Do. do. do.
Ring Frames	Howard & Bullough, Tweedale & Smalley, and Brooks & Doxey.
Mules	Asa Lees & Co., Ltd.
Winding and Warping ..	Henry Livesey, Atherton Bros. and Howard & Bullough.
Sizing	Howard & Bullough and Henry Livesey.
Looms	Henry Livesey, J. & R. Shorrock and J. Harrison & Sons.
Bleaching and Finishing	Mather & Platt, Ltd.
Humidifiers..	Mather & Platt, Ltd.
Sprinklers	Do.
Steam Engine	Hick Hargreaves & Co., Ltd.
Boilers	Babcock & Wilcox, Ltd.
Electric Generators ..	British Westinghouse Elec. Mfg. Co., Ltd.

STANDARD MILLS CO., LTD.

Started in 1890 as the BALLADINA MILLS and formed into the STANDARD MILLS in 1891.

REGISTERED OFFICE :—24, BRUCE STREET, FORT, BOMBAY.

Telegrams : " TASTANDAVI, BOMBAY." Phone : 26041.

Directors :

Sir D. J. Tata, Kt.
R. D. Tata.
Mafatlal Gagalbhai.
S. D. Saklatvala.
Pransukhlal Mafatlal.
N. B. Saklatvala, C.I.E.

Agents :
Tata Sons, Ltd.
Secretary :
H. N. Hiramaneck.
Auditors :
S. B. Billimoria & Co.
Rustomji Modi & Damania.
Solicitors :
Wadia Ghandy & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 12,00,000 divided into 2,400 Ordinary Shares—divided into 2,031 Whole Shares of Rs. 500 each and 1,476 Quarter Shares of Rs. 125 each. Issued, Rs. 12,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	12,00,000	12,00,000	12,00,000	12,00,000	12,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	53,11,242	45,51,896	48,86,272	32,90,971	30,94,188
Reserve Funds	18,62,550	20,55,678	22,58,462	23,71,385	23,71,385
Land & Building ..	9,57,363	9,15,997	8,90,943	8,92,661	8,67,778
Plant & Machinery ..	14,91,397	13,77,120	13,52,037	24,49,316	12,08,467
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	21,53,363	16,94,495	11,35,312	4,17,768	1,90,721
Dividend per Share ..	370	350	280	100	60

Standard Mills Co., Ltd.—*contd.*

Mill : Parbhadevi Road. **Phone :** 40889.

Spindles : Ring, 40,576 / Mule, 3,960 } 44,536. **Looms,** 1,179. **Hands,** 2,278.

Yarn Spun : 6½*s*, 8*s* and 10*s*. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	30,45,633	Salaries and Wages at Mill and Office	8,75,893
Stores	3,64,911	Agents' Remuneration	54,544
Coal	1,640	Interest	1,84,975
Liquid Fuel	1,14,669		
Electric Energy	1,08,374		

Mill Staff. *(Copyright.)*

Manager	J. Welsh.	Bleacher	V. S. Patwardhan.
Carding and Spinning Master	F. H. Marshall.	Dyer	Ardeshir Shapurji.
Weaving Master	Herbert Grundy.	Mech. Engineer	E. H. Sagdiwala

Plant & Machinery. — Suppliers. *(Copyright.)*

Openers and Scutchers	Lord Bros.
Cards	Howard & Bullough and Tweedales & Smalley.
Draw Frames, Roving Frames, Ring Frames	Lord Bros., Howard & Bullough and Tweedales & Smalley.
Mules	Asa Lees & Co., Ltd.
Winding and Warping	William Dickinson and Henry Livesey.
Sizing	William Dickinson, Howard & Bullough and Butterworth & Dickinson.
Looms	Henry Livesey, William Dickinson, B. Cohen, George Keighley, Robert Hall, Gregson & Monk, and George Hattersley.
Bleaching, Finishing	C. G. Haubold, Tomlinson and Mather & Platt.
Dyeing	C. G. Haubold and S. Walker & Son.
Humidifiers	Herbert Smethurst & Sons.
Sprinklers	Mather & Platt and Hoffman Sprinkler Co.
Boilers	Hick Hargreaves & Co., Thomas Beeley & Co., and Tinker Shenton & Co.
Electric Generators	Thomas Parker Ltd.
Electric Motors	British Westinghouse, General Electric Co., Siemens Bros., English Electric Co., and Jost's Engineering Co.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

TATA MILLS, LTD.

Started 1913.

The figures include the BOMBAY UNITED MILL which was merged into the TATA MILLS in 1920 and sold to the SWADESHI MILLS CO., in May, 1925.

REGISTERED OFFICE :—24, BRUCE STREET, FORT, BOMBAY.

Telegrams : " TATAMILL, BOMBAY." Phone : 26041.

Directors :
Sir D. J. Tata, Kt.
Hon. Lallubhai Samaldas Mehta, C.I.E.
R. D. Tata.
Narottam Morarjee.
S. D. Saklatvala.
J. A. D. Naoroji.
N. B. Saklatvala, C.I.E.
(*Special Director*).

Agents :
Tata Sons, Ltd.

Secretary :
N. B. Mehta.

Auditors :
K. S. Aiyar & Co.
S. B. Billimoria & Co.

Solicitors :
Little & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 1,00,00,000 divided into 11,000 Preference Shares of Rs. 500 each and 9,000 Ordinary Shares of Rs. 500 each.
Issued 7,000 Preference Shares and 6,000 Ordinary Shares.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital	64,87,100	64,87,100	64,87,100	64,87,100	64,87,100
Debenture ..	*Nil.*	*Nil.*	*Nil.*	97,81,000	1,00,00,000
Debt Loans ..	2,85,30,472	2,44,26,585	2,33,32,718	1,29,35,673	1,16,18,065
Reserve Funds*.	14,48,167	28,50,079	39,04,911	40,87,625	40,98,840
Land & Bldg. ..	1,18,43,361	1,18,75,987	1,18,75,987	1,18,75,987	1,18,96,752
Plant & Machinery	1,15,85,782	1,18,94,249	1,13,19,413	1,14,66,014	1,14,66,014
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	12,77,270
Profits	20,62,312	36,05,703	20,01,650	2,40,869	*Nil.*
Dividend per share	†27½	27½	27½	27½	*Nil.*
	‡100	150	100	*Nil.*	*Nil.*

† Preference shares. ‡ Ordinary shares.
* Reserve Funds include Depreciation Funds for Buildings and Machinery.

Tata Mills, Ltd.—*contd.*

Mills : Dadar. **Phones :** 40378.

Spindles : Ring, 63,248. **Looms,** 1,800. **Hands,** 4,200.

Yarn Spun : 8½s (occasionally). **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	77,00,729	Salaries and Wages ..	22,79,078
Stores	8,53,410	Office Establishment & Allowance. Agents' Remuneration ..	73,859
Liquid Fuel and Electric Energy	5,29,020	Interest (General)	7,48,995

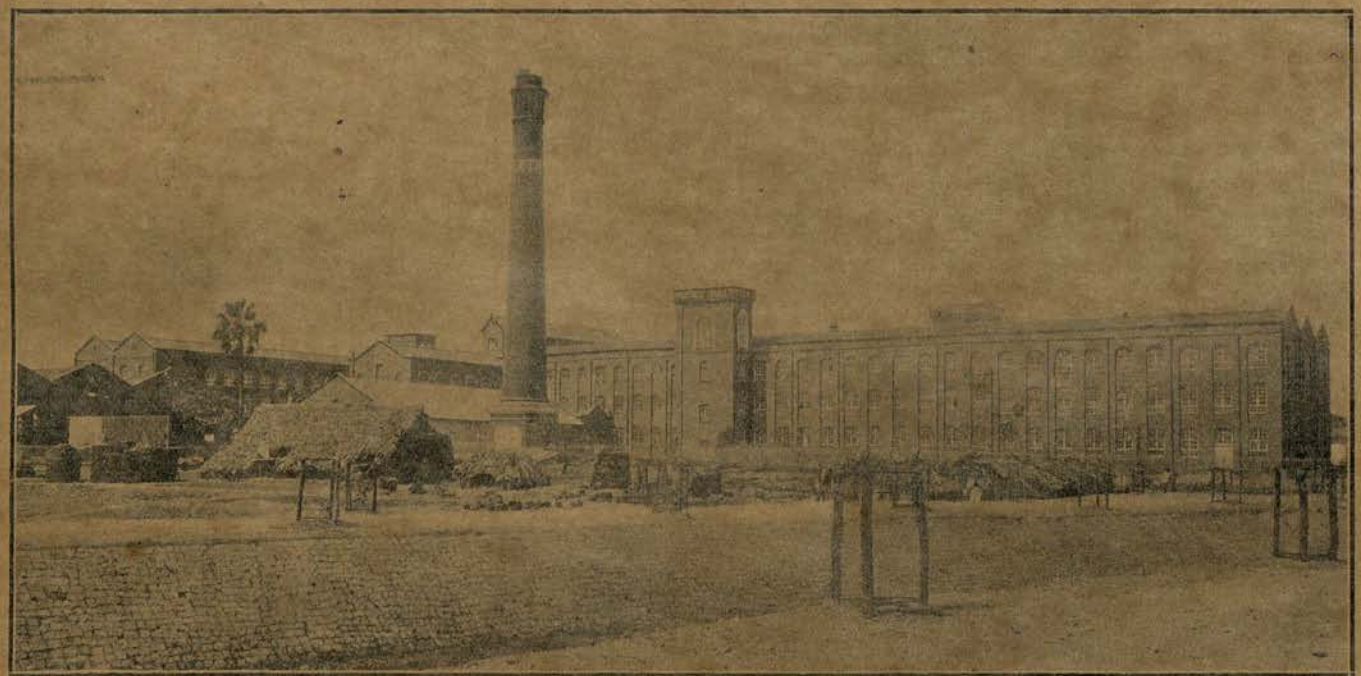
Mill Staff. (*Copyright.*)

Manager ..	R. M. Daruwala.	Finisher and Dyer	F. H. Seervai.
Carding and Spinning Master	H. M. Vajifdar.	Mech. Engineer	M. S. Balsara.
Weaving Master	R. A. Baliwala.	Elect. Engineer	J. M. Kuka.

Plant & Machinery. — Suppliers, (*Copyright.*)

Openers and Scutchers ..	Lord Brothers.
Cards	Elijah Ashworth.
Draw Frames	Platt Bros.
Roving Frames	Do.
Ring Frames	Brooks & Doxey, Platt Brothers, Asa Lees and Howard & Bullough.
Winding and Warping ..	Thomas Holt.
Sizing	Butterworth & Dickinson.
Looms	Do. do.
Bleaching and Finishing ..	Mather & Platt and J. H. Riley.
Dyeing	J. H. Riley & Co.
Humidifiers .. .. Sprinklers	Mather & Platt Ltd.
Boilers	Daniel Adamson & Co.
Electric Motors ..	Metropolitan and Vickers Electrical Co.

Mills driven electrically by the Tata Hydro-Electric Power Supply.



THE TEXTILE MILL.

Photo : Copyright.

HON. MR. NAOROJI NUSSERWANJI WADIA, C.I.E.
Born 1849. Died 1899.

"Mr. Wadia made his mark not only as an expert mill manager and engineer, but as the pioneer of industrial enterprise at the very early stage of India's awakening towards the development of her manufactures. A citizen with many-sided activities Mr. Naoroji Wadia rendered valuable services to the people of this Presidency in various directions and dying in 1899, at the early age of 50, he left an honourable record of solid work in the cause of Technical Education for Indian youths and in the advancement of the textile and allied industries with which his name has been intimately associated."

—*Indian Textile Journal.*

MR. N. N. WADIA, C.I.E.

As chairman of the Bombay Millowners' Association for 1925, Mr. N. N. Wadia rendered valuable services in connection with the agitation against the Excise Duty, the abolition of which has been greatly due to his efforts and influence. His donation of Rs. 16,00,000 for a Maternity Hospital for female workers in Bombay factories is a benefaction in memory of his father. Laying the foundation stone of the building on June 9th, 1925, His Excellency Sir Leslie Wilson, Governor of Bombay, said :—

" For all time to come the thoughts of many thousands of grateful fathers and mothers and of future citizens of Bombay will turn with deep gratitude to the name of Wadia, and in that gratitude and in that sure knowledge of suffering spared, and of lives saved by his great act of generosity, will be Mr. Wadia's sure reward."

BOMBAY DYEING AND MANUFACTURING CO., LTD.

Includes THE BOMBAY DYE WORKS, started in 1876, THE TEXTILE MILL, started in 1896, and THE SPRING MILL, started in 1908.

REGISTERED OFFICE :—HOME STREET, FORT, BOMBAY.

Telegrams : "DYEING, BOMBAY." / "TEXTILE, BOMBAY." Phone ; 25094.

Directors :
N. N. Wadia, C.I.E.
W. Reid.
Sir Jamsetjee Jejeebhoy, Bart., K.C.S.I.
N. B. Saklatvala, C.I.E.
Leslie Blunt.
V. A. Grantham.
Bomanjee Aderjee.
D. F. Batliwala.

Agents :
Nowrosji Wadia & Sons.

Auditors :
A. F. Ferguson & Co.

Solicitors :
Craigie, Blunt & Caroe.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 64,00,000 divided into 25,600 Ordinary Shares of Rs. 250 each. Issued, Rs. 62,74,500.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	31,12,000	62,74,500	62,74,500	62,74,500	62,74,500
Debenture ..	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans ..	1,14,88,351	1,15,31,905	1,33,24,575	1,46,69,740	1,29,54,273
Reserve Funds ..	1,92,63,939	2,28,05,191	2,50,35,530	2,64,64,977	2,74,72,448
Land & Building ..	72,40,759	83,33,009	88,72,236	97,16,319	98,49,302
Plant & Machinery	86,68,838	1,31,83,877	1,69,43,469	1,91,94,021	1,92,58,459
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*1,46,025
Profits	88,92,846	61,52,286	45,46,262	12,37,308	*Nil.*
Dividend Per Share	288+250†	192	144	65	50‡

*The Loss is after making allowance for depreciation of Rs. 9,75,000.
†Bonus share. ‡From Dividend Fund Account.

Bombay Dyeing and Manufacturing Co., Ltd—*contd.*

THE BOMBAY DYE WORKS

Works : Cadell Road, Mahim. **Phone :** 40859.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Stores	2,84,862	Coal	22,595
Chemicals	2,73,686	Salaries and Wages at Mill and Office	3,18,056
Oil Fuel	1,32,974	Agents' Remuneration ..	43,619
Grey Yarn	33,70,223		

Works Staff. (*Copyright.*)

Manager, J. Muir. Dyer, A. Green. Engineer, C. H. Shroff.

THE TEXTILE MILL.

Mill : Elphinstone Road. **Phone :** 40923.

Spindles : Ring, 69,648 / Mule, 800 } 70,448. **Looms,** 1,694. **Hands,** 3,440

Yarn Spun : 2*s* to 36*s*. **Cloth :** Grey, Bleached, and Coloured.

Principal Items of Expenditure for year ended December, 1924.

	Rs.		Rs.
Cotton	65,23,252	Salaries and Wages at Mill and Office	16,01,866
Stores	6,97,300	Agents' Remuneration ..	33,177
Coal and Oil Fuel	3,84,483	Interest	1,97,813

Mill Staff. (*Copyright.*)

Manager ..	W. Pennington.	Bleacher & Finisher ..	A. Peel.
Carding Master ..	F. F. Bignell.	Dyer	H. Lawton.
Spinning Master ..	N. F. Vajifdar.	Chief Engineer ..	A. Powell.
Weaving Master ..	T. Hinchcliffe.		

Plant & Machinery.	**Suppliers.** (*Copyright.*)
Openers and Scutchers, Cards .. .., Drawing and Roving Frames .. .., Ring Frames & Mules, Winding & Warping, Sizing & Looms ..	Platt Bros. & Co., Ltd., Oldham.
Bleaching, Finishing & Dyeing .., Humidifiers ..	Mather & Platt, Ltd., Manchester.
Sprinklers	George Mills & Co., Ltd., Radcliffe (Titan).
Steam Engine	Hick, Hargreaves & Co., Ltd.
Boilers	Do. & Babcock & Wilcox,
Electric Generators & Motors ..	Mather & Platt, Ltd.,

Waste Plant driven Electrically.

Bombay Dyeing and Manufacturing Co., Ltd.—*contd.*

THE SPRING MILL.

Mill : Naigam Road, Dadar. **Phone :** 40999.

Spindles : Ring, 109,848. **Looms,** 3,116. **Hands,** 5,300.

Yarn Spun : 8½s to 40s. **Cloth :** Grey, Bleached, and Coloured.

Principal Items of Expenditure for year ended December, 1924.

	Rs.		Rs.
Cotton	..1,03,83,144	Salaries and Wages at Mill and Office	22,86,129
Stores	9,87,913	Agents' Remuneration ..	56,118
Coal and Oil Fuel	5,11,248	Interest	3,95,626

Mill Staff. (*Copyright.*)

Manager	P. T. Harrison.	Weaving Master ..	H. Ashworth.
Carding Master ..	W. H. Smith.	Chief Engineer ..	W. B. Bradford.
Spinning Master ..	H. Hardwick.	Electrical Engineer ..	Do.

Plant & Machinery. **Suppliers,** (*Copyright.*)

Openers and Scutchers, Cards .. .., Drawing Frames .., Roving Frames .., Ring Frames .., Winding and Warping, Sizing .. .., Looms	.. Platt Bros. & Co., Ltd., Oldham.
Humidifiers	Mather & Platt, Ltd. & Ingersoll Rand (India), Ld.
Sprinklers	George Mills & Co., Ltd., Radcliffe.
Steam Engine	Hick, Hargreaves & Co., Ltd.
Boilers	Do. & Babcock & Wilcox, Ld.
Electric Generators ..	Fraser and Chalmers Engineering Works, Kent.
Electric Motors	Mather & Platt, Ltd., Manchester.

Spinning Machinery driven by Steam Engine and Weaving by Electric Generating Plant on the premises.

CENTURY SPINNING & MANUFACTURING CO., LTD.

INCLUDES THE ZENITH MILLS.

CENTURY started in 1898 and ZENITH in 1907.

REGISTERED OFFICE :—ESPLANADE ROAD, FORT, BOMBAY.

Telegrams : "CENTURY." Phone : 21505.

Directors :

C. N. Wadia, C.I.E.
Narottam Morarjee.
Sir Jamsetjee Jeejeebhoy, Bart., K.C.S.I.
N. B. Saklatvala, C.I.E.
Leslie Blunt.
H. P. Mody.

Agents :

C. N. Wadia & Co.

Secretary :

Yeshwantrao Putlajee.

Auditors :

A. F. Ferguson & Co.

Solicitors :

Craigie, Blunt & Caroe.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 20,00,000 divided into 20,000 Ordinary Shares of Rs. 100 each. Issued, 18,500 Shares.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital..	18,50,000	18,50,000	18,50,000	18,50,000	18,50,000
Liabilities ..	62,36,018	43,99,943	56,75,995	72,38,089	70,28,607
Funds ..	96,99,348	1,11,45,448	1,21,60,991	1,27,78,471	1,27,07,975
Land & Building.	32,37,812	36,99,618	43,39,114	46,22,281	47,69,441
Plant & Machinery	55,35,041	62,42,413	78,40,838	81,11,901	79,69,469
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	4,61,451
Profits	43,02,899	30,42,241	21,77,693	4,57,363	*Nil.*
Dividend per Share .	144	120	72	26	20

Century Spg. & Mfg. Co., Ltd.—*contd.*

Mill : Elphinstone Road. **Phone :** 40984.

Spindles : Ring, 87,980 / Mule, 16,700 } 104,680. **Looms,** 2,996. **Hands,** 5,800.

Yarn Spun : 2*s* to 6½*s*. **Cloth :** Grey, Bleached, and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton, Stores, Coal	90,02,235	Salaries and Wages at Mill and Office and Agents' Remuneration	22,31,130
Electric working charges ..	3,90,265	Interest	4,07,625

Mill Staff (*Copyright.*)

Manager	J. G. Anderson.	Finisher ..	W. Isherwood.
Carding Master ..	E. Preston.	Dyer ..	
Spinning Master ..	W. Heywood.	Mechanical and Electrical Engineer	H. Pearson.
Weaving Masters ..	J. B. Thornber. M. Edmondson.		

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers, Cards .. .., Drawing Frames ..., Roving Frames .., Ring Frames .., Mules	Platt Bros. & Co., Ltd., Oldham.
Winding and Warping, Sizing	Platt Bros & Co., Ltd., Howard & Bullough, Ltd.
Looms	Platt Bros. & Co., Ltd., Henry Livesey, Ltd.
Bleaching .. .., Finishing .. .., Dyeing	Mather & Platt, F. B. Gebauer, J. H. Riley & Co., Sir James Farmer Norton & Co.
Humidifiers	Mather & Platt, Ltd., Herbert Smethurst & Sons.
Sprinklers	Mather & Platt, Ltd., Manchester.
Steam Engine, Boilers	Hick, Hargreaves & Co., Ltd., Bolton.
Electric Generators ...	Hall and Siemens.
Electric Motors	Mather & Platt, Ltd., Manchester.

MOON MILLS, LTD.

Started in 1897.

REGISTERED OFFICE:—70, FORBES STREET, BOMBAY.

Telegrams: "PIENSEE," BOMBAY. Phone: 20157.

Directors:

A. J. Raymond.
F. R. Wadia.
F. E. Dinshaw.
C. P. Wadia. } *Ex-officios.*
N. P. Whaddia. }

Agents:

P. A. Hormarjee & Co.

Auditors:

Sorabjee C. Wadia.
Navroz A. Davar, M.A., A.S.A.A. (Lond.)

Solicitors:

Wadia, Ghandhy & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 5,00,000 divided into 2,000 Ordinary Shares of Rs. 250 each. Issued, 1,000 Ordinary Shares of Rs. 250 each.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	2,50,000	2,50,000	2,50,000	2,50,000	2,50,000
Debenture	4,00,000	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	11,27,000	2,27,000	2,06,000	3,03,000	1,70,000
*Reserve Funds ..	12,79,000	29,50,000	40,05,000	44,65,000	44,79,000
Land & Building ..	6,00,000	6,29,000	6,61,000	7,54,000	12,00,000
Plant & Machinery ..	6,02,000	6,49,000	7,48,000	7,73,000	13,65,000
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	21,05,000	19,84,000	5,70,000	34,000	65,000
Dividend per Share ..	100	100	50	15	15

* Reserve Fund includes Depreciation, and Funds for Equalization of Dividend, etc.,

The Mill has been a purely spinning mill up to the middle of 1925: The Weaving Department started working from July 1925.

Moon Mills, Ltd.—*contd.*

Mill : Sewree. **Phone :** 40866.

Spindles : Ring, 25,200 / Mule, 13,294 } 38,494. **Looms,** 756. **Hands,** 1,400

Yarn Spun : Up to 30s. **Cloth :** Grey, Bleached, and Fancy.

Principal Items of Expenditure for year ended 1st December, 1924.

	Rs.		Rs.
Cotton	29,89,643	Liquid Fuel	6,564
Salaries and Wages at Mill and Office)	2,69,530	Electric Energy ..	73,193
Stores	81,815	Agents' Remuneration ..	60,990

Mill Staff. (*Copyright.*)

Manager, Carding and Spinning Master } A. R. Bhagwagar.

Weaving Master .. A. D. Kapadia.

Finisher and Dyer } .. A. K. Jokhi. (Havero Trading Co., Rotterdam.

Mechanical and Electrical Engineers } R. C. Daruwala, C. M. Jasavala.

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers ..	Taylor, Lang & Co., Ltd., Stalybridge.
Cards	Howard & Bullough, Ltd.
Drawing Frames, Roving Frames ..	Do.
Ring Frames	Howard & Bullough, Ltd., Accrington.
Mules	Taylor, Lang & Co., Ltd., Stalybridge.
Winding and Warping, Sizing .. .., Looms	Platt Brothers & Co., Ltd., Oldham.
Finishing	Platt Bros. & Co., J. H. Riley and Mather & Platt.
Dyeing	Thomas Broadbent & Sons, Ltd., Huddersfield.
Humidifiers	Mather & Platt, Ltd., and Ingersoll Rand (India), Ltd.
Sprinklers	Mather & Platt, Ltd.
Boilers	John Musgrave & Sons and Thomas Beeley & Son.
Electric Transformers ..	Westinghouse Electric Co., and Andhra Valley Power Supply Co.
Electric Motors	Metropolitan-Vickers Electric Co.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

COORLA SPINNING AND WEAVING CO., LTD.

Started in 1874.

REGISTERED OFFICE :—CHURCH GATE STREET, FORT, BOMBAY.

Telegrams : "TRIANGLE." Phone : 20095.

Directors :

Sir Cowasjee Jehangir, Bart.
H. M. Mehta.
A. P. Sabavala, Bar-at-Law.
Byramjee Jeejeebhoy.
Kikabhai Premchand.

Agents:

Cowasjee Jehangir & Co., Ltd.

Auditors :

Ratansha Shapurjee Bharucha.
S. B. Billimoria & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 13,00,000 divided into 13,000 Ordinary Shares of Rs. 100 each. Issued, 13,000 Shares of Rs. 100 each—Rs. 13,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	13,00,000	13,00,000	13,00,000	13,00,000	13,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve Funds	15,40,919	20,55,052	24,39,314	28,03,689	27,58,653
Land & Building ..	7,36,434	7,36,434	7,45,522	7,50,252	7,50,252
Plant & Machinery ..	15,73,514	15,81,475	16,24,949	16,26,630	16,33,855
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	15,88,803	17,03,061	10,52,893	3,09,156	2,81,391
Dividend per Share ..	550	550	30	15	10
	On shares of Rs. 1,000 each.		On shares of Rs. 100 each.		

Coorla Spinning and Weaving Co., Ltd.—*contd.*

Mill : Coorla. **Phone :** 87023.

Spindles : Ring, 24,948 / Mule, 2,692 } 27,640. **Looms,** 719. **Hands,** 1,600.

Yarn Spun : 6*s* to 20*s*. **Cloth :** Grey, and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	24,94,540	Salaries and Wages at Mill and Office	7,36,944
Stores	2,35,394	Agents' Remuneration ..	30,000
Fuel	1,35,569		

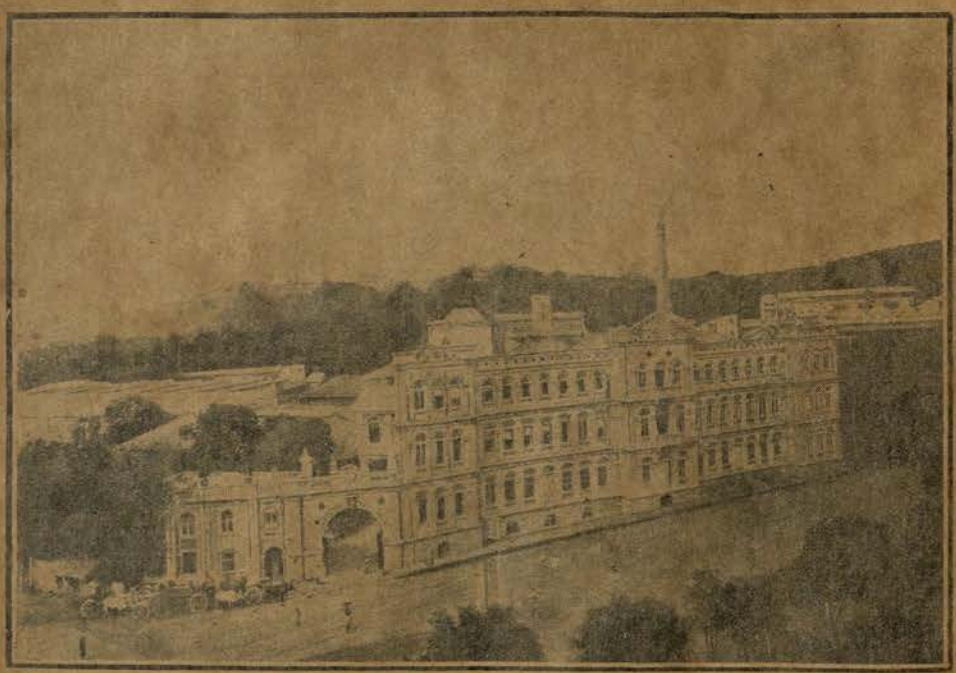
Mill Staff. *(Copyright.)*

Superintendent .. Bapuji K. Dhondy.	Weaving Master .. J. M. Chinoy.
Carding and Spinning Master .. N. E. Screwala.	Mechanical Engineer R. B. Bhownugri.

Plant & Machinery.	Suppliers. *(Copyright.)*
Openers and Scutchers ..	Tweedales & Smalley and Lord Bros.
Cards	Howard & Bullough, Tweedales & Smalley and Platt Bros.
Drawing Frames	Tweedales & Smalley, Ltd., Castleton.
Roving Frames, Ring Frames	Tweedales & Smalley and Howard & Bullough.
Mules	Asa Lees & Co., Ltd., Oldham.
Winding and Warping ..	Butterworth & Dickinson, Platt Bros. and Hacking & Co.
Sizing	Butterworth & Dickinson, John Dugdale & Son and Henry Livesey.
Looms	Butterworth & Dickinson and Hacking & Co.
Finishing	Bentley & Jackson and J. H. Riley & Co.
Humidifiers	Ingersoll Rand (India), Ltd. and Mather & Platt, Ltd.
Sprinklers	Witter & Sons.
Steam Engines, Boilers	John Musgrave & Sons, Ltd., Bolton.

The late Mr. BOMANJI DINSHAW PETIT.

The late Mr. FRAMJI DINSHAW PETIT.



THE MANEKJI PETIT MILLS: STARTED IN 1860.

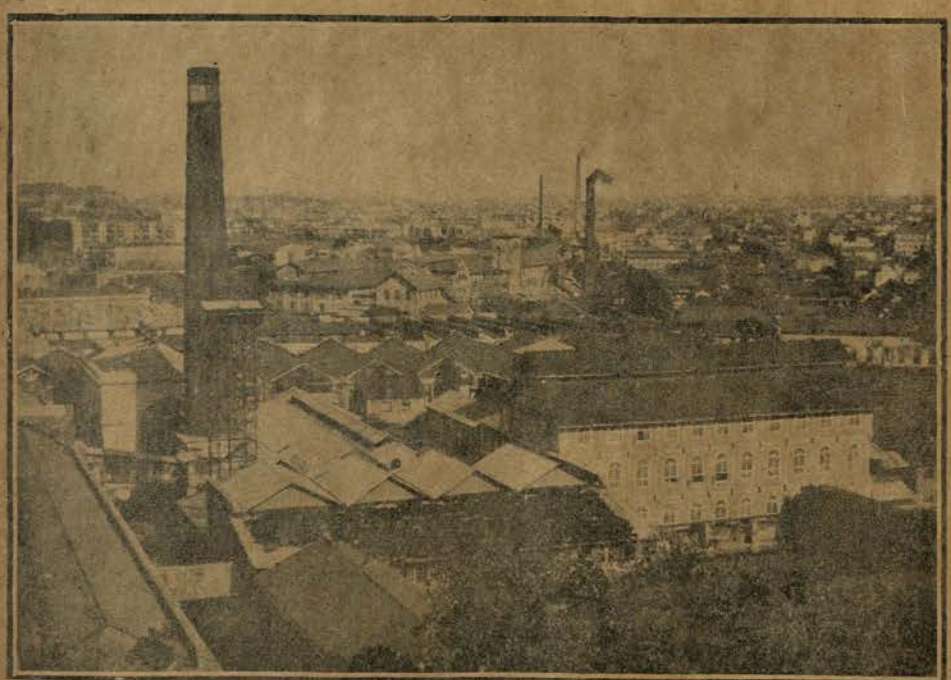
One of the Four Pioneer Factories still working under the same Agency.

SIR DINSHAW MANECKJI PETIT (FIRST BARONET.)
Born 1823. Died 1901.

In the person of Sir Dinshaw Petit, Bombay has lost one of her noblest citizens. To give a sketch of the trade life of Sir Dinshaw Petit would be to recapitulate the trade history of Bombay for the past fifty years, so closely has he been associated with almost every movement of a commercial character.—*Indian Textile Journal.*

SIR DINSHAW MANEKJI PETIT
(SECOND BARONET).

MR. JEHANGIR BOMANJI PETIT.



THE MANEKJI PETIT MILLS IN 1925.

[Photo Copyright.

MANOCKJI PETIT MANUFACTURING CO., LTD.

(Comprising the MANOCKJI PETIT, the DINSHAH PETIT AND the BOMONJI PETIT MILLS.)

REGISTERED OFFICE :—359, HORNBY ROAD, FORT, BOMBAY.

Telegrams : " DINPETIT," BOMBAY. Phone : 20075.

Directors :

Sir Dinshaw M. Petit, Bart.
Dadabhoy Merwanji Jeejeebhoy.
Manockjee Cowasjee Petit.
Jehangir Bomanjee Petit.
Byramjee Jeejeebhoy.

Agents :

D. M. Petit Sons & Co.

Secretary :

E. D. Mody.

Auditors :

Rustomjee, Modi and Damania.
Chandabhoy and Jasoobhai.

MILLS SUPERINTENDENT:-C. D. PANDAY.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 40,50,000 divided into 4,050 Ordinary Shares of Rs. 1,000 each. Issued, 3,609 ½ Shares of Rs. 1,000 each.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	36,09,500	36,09,500	36,09,500	36,09,500	36,09,500
Debenture ..	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans ..	70,71,829	30,42,173	55,12,243	79,21,248	99,96,930
Reserve Funds ..	25,00,489	32,00,489	35,00,000	35,09,870	34,15,470
Land & Building .	46,11,377	50,92,154	54,98,292	58,30,946	58,36,976
Plant & Machinery	99,82,976	1,03,37,886	1,09,74,358	1,18,69,799	1,19,64,633
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	4,37,168
Profits ..	50,59,492	51,60,145	32,75,609	62,912	*Nil.*
Dividend per Share	650	700	500	100	50

Manockji Petit Manufacturing Co., Ltd.—*contd.*

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	1,08,76,451	Salaries and Wages at Mill and Office	35,33,244
Stores	10,73,392	Agents' Remuneration ..	4,38,912
Coal	1,13,684		
Liquid Fuel	4,77,661	Interest	4,26,598
Electric Energy	1,73,722		

Manockji Petit Mill.

Started in 1860.

Mill : Tardeo. **Phone :** 41818.

Spindles : Ring, 68,996. **Looms,** 2,379. **Hands,** 5,734.

Yarn Spun : 4s to 30s. **Cloth :** Grey, Bleached and Coloured.

Mill Staff. (*Copyright.*)

Manager	A. P. Ghadially.	Finisher and Dyer	.. P. P. Patel.
Carding Master ..	B. D. Wadia.	Mech. Engineer	.. D. M. Mehta.
Spinning Master ..	H. D. Kavas Cama.	Elect. Engineer	.. P. H. Daruwala.
Weaving Master ..	D. D. Katrak.		

Plant & Machinery.	Suppliers. (*Copyright.*)
Openers and Scutchers, Cards, Drawing Frames, Roving Frames, Ring Frames	Platt Brothers & Co., Ltd.
Winding and Warping, Sizing, Looms	Platt Bros. & Co. and Butterworth & Dickinson.
Finishing	J. H. Riley & Co., Ltd., Bury.
Humidifiers	Mather & Platt, Ltd., J. A. Harts and Dawson Taylor & Co.
Sprinklers	Mather & Platt, Ltd.
Steam Engines, Boilers	Hick, Hargreaves & Co., Ltd., Bolton.

Manockji Petit Manufacturing Co., Ltd.—*contd.*

Dinshaw Petit Mill.

Started as ROYAL MILL in 1876. Changed to DINSHAH PETIT in 1880.

Mill : Lalbag, Parel. **Phone :** 40854.

Spindles : Ring, 42,296. **Looms,** 1,358. **Hands,** 2,400.

Yarn Spun : 4*s* to 32*s*. **Cloth :** Grey, Bleached and Coloured.

Mill Staff. (*Copyright.*)

Manager	H. G. Allanson.	Weaving Master	S. P. Lalla.
Carding Master	K. S. Dadachanji.	Mech. Engineer	H. P. Dadyburjor.

Plant & Machinery.	**Suppliers.** (*Copyright.*)
Openers and Scutchers. Cards & Drawing Frames. Roving & Ring Frames. Winding and Warping. Sizing and Looms ..	Platt Brothers & Co., Ltd., Oldham.
Finishing	J. H. Riley & Co., Ltd., Bury.
Humidifiers & Sprinklers ..	Mather & Platt, Ltd., Manchester.
Engines & Boilers	Hick, Hargreaves & Co., Ltd., Bolton.

Bomanji Petit Mill.

Started as the GORDAN MILL in 1882. Changed into BOMANJI PETIT in 1892.

Mill : Mahaluxmi. **Phone :** 40884.

Spindles : Ring, 42,368. **Looms,** 1,263. **Hands,** 2,269.

Yarn Spun : 6*s* to 26*s*. **Cloth** Grey, Bleached and Coloured.

Mill Staff. (*Copyright.*)

Manager	D. M. Marshall.	Finisher & Dyer ..	F. P. Munshi.
Carding Master ..	J. P. Ghadially.	Mechanical Engineer ..	N. B. Mistry.
Spinning Master ..	P. N. Secretary.	Electrical Engineers ..	C. N. Nowdar.
Weaving Master ..	D. R. Billimoria.		B. N. Driver.

Plant & Machinery.	**Suppliers.** (*Copyright.*)
Openers and Scutchers Cards & Drawing Frames Roving & Ring Frames Winding and Warping Sizing and Looms ..	*Platt Brothers & Co., Ltd., Oldham.*
Bleaching and Finishing ..	J. H. Riley & Co., Ltd., Bury.
Dyeing	Thomas Broadbent & Co., and Fielden & Co.
Humidifiers	Dawson & Taylor.
Sprinklers	Mather & Platt, Ltd., Manchester.
Boilers	Babcock & Wilcox, Ltd., Renfrew (Scotland).
Electric Motors	Metropolitan-Vickers Electrical Co., Ltd.

Mill driven electrically by the Andhra Valley Power Supply.

FRAMJEE PETIT SPG. & MFG. CO., LTD.

Started in 1883.

REGISTERED OFFICE :—359, HORNBY ROAD, FORT, BOMBAY.

Directors :

Sir Dinshaw M. Petit, Bart.
Manockjee Cowasjee Petit.
Dadabhoy Merwanjee Jeejeebhoy.
Sorabjee Cowasjee Petit.
Jehangir Bomanjee Petit.
Byramjee Jeejeebhoy.

Agents :

D. M. Petit Sons & Co.

Auditors :

Chandabhoy and Jassoobhoy.
Rustomjee Modi and Damania.

Solicitors :

Craigie, Blunt & Caroe.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 14,00,000 divided into 1,400 Ordinary shares of Rs. 1,000 each. Issued, Rs. 14,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	12,50,000	12,50,000	12,50,000	12,50,000	12,50,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	8,38,265	8,93,806	12,65,056	13,44,031	26,52,374
Reserve Funds	27,47,754	31,88,288	31,47,884	28,95,139	27,78,760
Land & Buildings ..	8,29,756	9,17,812	9,18,064	9,22,909	9,22,909
Plant & Machinery ..	19,60,943	20,67,338	21,83,801	26,99,207	29,15,327
Loss	*Nil.*	*Nil.*	*Nil.*	4,77,709	3,43,182
Profits	6,18,412	8,66,142	2,20,210	*Nil.*	*Nil.*
Dividend Per share ..	300	350	225	*Nil.*	*Nil.*

Framjee Petit Spg. & Mfg. Co., Ltd. —*contd.*

Mill Mazagon. **Phone :** 40936.

Spindles : Ring, 32,584. **Looms,** 929. **Hands,** 2,400.

Yarn Spun : 6½*s* to 16½*s*. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

Mill closed for 8½ months.

	Rs.		Rs.
Cotton	7,10,774	Salaries and Wages at Mill and Office	3,06,438
Stores	1,05,649	Agents' Remuneration ..	5,816
Coal	5,346	Interest	60,514
Liquid Fuel	50,779		

Mill Staff. (*Copyright.*)

Manager and Carding Master	B. H. Chavala.	Weaving Master ..	B. C. Gotla.
Spinning Master ..	H. J. Patel.	Mech. Engineer ..	Wirbhadra M. Anja.

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers ..	Platt Bros. & Co., Ltd.
Cards	Do. and Elijah Ashworth.
Drawing Frames	Platt Bros. & Co.
Roving Frames, Ring Frames	Do. and Asa Lees & Co.
Winding and Warping ..	Platt Bros., Asa Lees, George Keighley and Universal Winding Co.
Sizing	Platt Bros., Butterworth & Dickinson and George Keighley.
Looms	Platt Bros. and George Keighley.
Finishing	J. H. Riley & Co., Ltd.
Humidifiers, Sprinklers	Mather & Platt, Ltd.
Steam Engine	John Musgrave & Sons, Ltd., Bolton.
Boilers	Babcock & Wilcox.
Electric Generators ..	Dick Kerr & Co.

EMPEROR EDWARD SPG. AND MFG. CO., LTD.

Started in 1874 as MAZAGON. Converted into EMPEROR EDWARD in 1903.

REGISTERED OFFICE :—7/11, ELPHINSTONE CIRCLE, FORT, BOMBAY.

Phone : 20214.

Directors :

Jehangir Bomanji Petit.

Dadabhoy Merwanjee Petit.

Dhunjeebhoy Bomanjee Petit.

Byramjee Nowroji Gamudia.

Agents :

B. D. Petit Sons & Co.

Secretary :

M. E. Captain.

Auditors :

Chandabhoy and Jassoobhoy.

Rustomjee Mody and Damania.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 15,00,000 divided into 3,000 Ordinary Shares of Rs. 500 each. Issued, Rs. 15,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	15,00,000	15,00,000	15,00,000	15,00,000	15,00,000
Debt Loans	16,06,000	25,96,000	30,11,000	35,00,000	46,00,000
Reserve Funds	24,68,000	30,60,000	33,46,000	33,02,000	32,14,000
Land & Building ..	7,39,800	9,68,200	13,09,100	14,13,300	14,79,100
Plant & Machinery ..	20,48,600	21,60,100	28,67,800	38,37,200	38,65,400
Loss	*Nil.*	*Nil.*	*Nil.*	1,73,421	1,80,216
Profits	14,89,497	15,45,609	9,53,881	*Nil.*	*Nil.*
Dividend per Share ..	175	200	140	15	*Nil.*

Emperor Edward Spg. and Mfg. Co., Ltd.—*contd.*

Mill : Mazagon. **Phone :** 20214.

Spindles : Ring, 46,452. **Looms,** 1,383. **Hands,** 2,600.

Yarn Spun : 20s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1923.

	Rs.		Rs.
Cotton	24,01,267	Salaries and Wages at Mill and Office	10,29,401
Stores	3,27,824	Agents' Remuneration ..	91,441
Coal	2,55,785	Interest	1,97,386

Mill Staff. (*Copyright.*)

Carding and Spinning Master	S. B. Colah.	Mechanical Engineer..	R.M. Badshaw.
Weaving Master ...	H. D. Postwala.	Electrical Engineer ..	N. Adajania.

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers ..	Creighton & Sons.
Cards	Platt Bros. and Elijah Ashworth.
Draw Frames	Do. Howard and Bullough.
Roving Frames	Do. Do. and Brooks & Doxey.
Ring Frames	Do. Do. Do. and Tweedales & Smalley.
Winding and Warping ..	Platt Bros., Howard & Bullough, Butterworth & Dickinson and Brooks & Doxey.
Sizing	Platt Bros. & Co.
Looms	Do. and Butterworth & Dickinson.
Finishing	Mather & Platt and John Downham.
Humidifiers Sprinklers	Mather & Platt, Ltd.
Steam Engine	Douglas & Grant.
Boilers	Babcock & Wilcox, Ltd.
Electric Generators ...	Dick Kerr & Co.
Electric Motors	English Electric Co., Ltd.

Mill driven electrically by energy generated on the Mill premises.

JAMSHED MANUFACTURING CO., LTD.

Started in 1885.

REGISTERED OFFICE :-COMMISSARIAT BUILDING, HORNBY ROAD, BOMBAY.

Telegrams : "EUCLID," BOMBAY. Phone : 20126.

Directors :

Hon'ble Pheroze C. Sethna, O.B.E.
F.E. Dinshaw.
Ardeshir B. Dubash.
T. V. Baddeley.
H. F. Commissariat.

Agents :
Hormusjee Ardeshir & Son.

Solicitors :
Ardeshir Hormasji Dinshaw & Co.

Auditors :
A. F. Ferguson & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 20,00,000 divided into 10,000 Preference Shares of Rs. 100 each and 4,000 Ordinary Shares of Rs. 250 each.

Issued : Ordinary, Rs. 9,23,500. Preference, Rs. 4,08,300.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	13,32,100	13,32,100	13,32,100	13,32,100	13,32,100
Debenture	10,00,000	10,00,000	10,00,000	10,00,000	10,00,000
Debt Loans	7,72,689	1,67,400	2,13,000.	5,00,045	8,00,443
Reserve Funds*	8,50,000	14,00,000	15,50,000	15,61,436	15,61,436
Land & Buildings ..	5,59,788	6,36,712	8,27,261	8,04,509	8,08,844
Plant, Machinery & Dead stock ...	19,63,528	20,71,999	22,34,517	22,47,573	22,60,134
Loss	*Nil.*	*Nil.*	*Nil.*	1,27,156	2,03,724
Profits	9,85,363	9,97,453	3,30,777	*Nil.*	*Nil.*
Dividend Per share ...	100	100	30	*Nil.*	*Nil.*

* Includes Depreciation and Dividend Equalisation Funds.

Jamshed Manufacturing Co., Ltd.—*contd.*

Mill : Ferguson Road. **Phone :** 40879.

Spindles : Ring, 29,932 / Mule, 1,368 } 31,300. **Looms,** 494. **Hands,** 1,714.

Yarn Spun : 3s to 32s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	21,46,478	Salaries and Wages at Mill and Office	5,69,087
Dyeing and Bleaching ..	54,629	Agents' minimum Remuneration .. .. (Waived voluntarily.)	20,000
Stores	1,95,965		
Fuel	30,178		
Electric drive	79,090	Interest	1,43,524

Mill Staff. (*Copyright.*)

Manager	K. N. Karanjia.	Weaving Master ..	B. P. Talati.
Carding Master ..	K. N. Bharoocha.	Mechanical Engineer ..	R. P. Vajifdar.

Plant & Machinery.	**Suppliers.** (*Copyright.*)
Openers and Scutchers ..	Platt Bros. & Co., Ltd., Oldham.
Cards	Howard & Bullough.
Drawing Frames	Do. and Asa Lees & Co.
Roving Frames	Do. Do. and Tweedales & Smalley.
Ring Frames	Brooks & Doxey, Asa Lees, Tweedales & Smalley and Dobson & Barlow.
Mules	Taylor, Lang & Co., Ltd., Stalybridge.
Winding and Warping ..	Robert Broadbent, Howard & Bullough, John Dugdale, Harling & Todd, Brooks & Doxey, Universal Winding Co., Hacking & Co. and Wm. Dickinson.
Sizing	Howard & Bullough and Willan & Mills.
Looms	Henry Livesey, Robert Hall, Butterworth & Dickinson and Hacking & Co.
Dyeing	Thomas Broadbent & Sons, Ltd., Huddersfield.
Humidifiers	Mather & Platt, Ltd.
Sprinklers	Do.
Steam Engine	J. & E. Wood.
Boilers	Thomas Beeley & Sons.
Electric Motors	British Westinghouse Electric & Mfg. Co., Ltd.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

BOMBAY COTTON MANUFACTURING CO., LTD.

Started in 1885. Reconstructed in 1909.

REGISTERED OFFICE:—COMMISSARIAT BUILDING, HORNBY ROAD, BOMBAY.

Telegrams "EUCLID." **Phone :** 20126.

Directors :
Kharshedjee Dhunjeebhoy Shroff.
Purshotum Jeewandas.
Rustam K. R. Cama.
Hon. Pheroze C. Sethna, O.B.E.
F. E. Dinshaw.
Ardeshir Bomanji Dubash.
Hormusjee Framjee Commissariat.

Agents :
Hormusjee Sons & Co.

Auditors :
A. F. Ferguson & Co.

Solicitors :
Payne & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 25,00,000 divided into 1,30,000 Preference shares of Rs. 10 each and 2,400 Ordinary shares of Rs. 500 each.

Issued Ordinary, Rs. 11,88,500 and Preference, Rs. 10,52,270.

	1921.	1922.	1923.	1924.	1925.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ...	22,44,770	22,44,770	22,44,770	22,44,770	22,44,770
Debentures*	10,00,000	10,00,000	10,00,000	10,00,000	*Nil.**
Debt Loans	51,158	*Nil.*	*Nil.*	2,50,001	5,62,019
Reserve Funds† ..	12,81,059	17,00,000	19,48,000	20,39,256	20,70,207
Land	79,128	79,128	79,128	79,128	79,128
Buildings	6,87,764	7,14,717	8,00,893	7,93,857	7,97,513
Plant & Dead Stock ..	18,34,373	20,02,088	21,01,669	20,94,917	20,94,917
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	29,379
Profits	13,19,096	11,04,658	6,67,126	1,23,537	*Nil.*
Dividend Per Share ..	200	200	100	65	*Nil.*

* Debentures Paid off on 31st May, 1924.

† Including Depreciation and Equalization of Dividend Funds.

Bombay Cotton Manufacturing Co., Ltd.—*contd.*

Mill : Kala Choki. **Phone :** 40846.

Spindles : Ring, 32,496 / Mule, 1,152 } 33,648. **Looms,** 795. **Hands,** 1,800.

Yarn Spun : 6$\frac{1}{2}$s to 20$\frac{1}{2}$s. Also Doubling. **Cloth :** Grey, Bleached, and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton		Salaries and Wages at Mill and Office	7,44,773
Coal and Liquid Fuel	.. 23,99,220	Dyeing and Bleaching ..	79,179
Electric Energy ..		Agents' Remuneration ..	21,800
Stores		Interest	27,047

Mill Staff. *(Copyright.)*

Manager	B. S. Cavarana.	Bleacher	Jal. N. Patel, B.A.
Carding and Spinning Master ..	B. S. Cavarana.	Mechanical Engineer and Electrical Engineer.	M. A. Buxey.
Weaving Master ..	D. B. Khajotia.		

Plant and Machinery. — Suppliers. *(Copyright.)*

Openers and Scutchers ..	Platt Bros. & Co., Ltd.
Cards .. / Draw Frames / Roving Frames	Howard & Bullough, Tweedales & Smalley and Platt Bros.
Ring Frames	Platt Bros., Brooks & Doxey, Tweedales & Smalley, and Dobson and Barlow.
Mules	Asa Lees & Co.
Winding and Warping ..	Platt Bros., George Keighley and Henry Livesey.
Sizing	Platt Bros. and Howard & Bullough.
Looms	Do. and George Keighley.
Bleaching .. .. / Finishing	Lang Bridge & Co.
Dyeing	Thos. Broadbent & Sons.
Humidifiers	Herbert Smethurst & Sons, Ltd.
Sprinklers	Hoffman Sprinkler Co., Ltd.
Boilers	Daniel Adamson & Co.
Diesel Engine	Sulzer Bros.
Electric Motors	Metropolitan-Vickers Co., Ltd.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

RUBY MILLS, LTD.

Started in 1889 as the SORAB WOOLLEN MILLS.
Reconstructed as RUBY MILLS in 1917.

REGISTERED OFFICE :—COMMISSARIAT BUILDING, HORNBY RD., BOMBAY.

Telegrams : "EUCLID," BOMBAY.

Directors :
Ardeshir Bomanji Dubash.
Chhagan Gopalji.
K. A. Dubash.
Gokuldas Doongersey.
Dharamsey Ratansey.
H. F. Commissariat.
Gustadji D. Billimoria.

Agents :
Hormusjee & Co.

Auditors :
Rustomjee N. Mehta & Co.

Solicitors :
Payne & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 12,00,000 divided into 12,000 Ordinary Shares of Rs. 100 each. Issued, Rs. 12,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	5,87,687	12,00,000	12,00,000	12,00,000	12,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	77,856	73,386	94,868	1,93,000	4,09,460
Reserve Funds* ..	1,65,975	3,66,000	6,00,000	6,35,000	5,15,000
Land	27,000	27,000	27,000	27,000	27,000
Buildings	1,73,439	2,76,387	3,13,839	3,52,060	3,52,672
Plant & Machinery ..	3,40,813	5,24,350	6,34,726	6,72,169	6,75,272
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	1,21,935
Profits	11,93,810	6,69,201	5,43,410	9,618	*Nil.*
Dividend per Share ..	201	25	25	*Nil.*	10‡

* Including Depreciation. ‡ Declared from the Reserve Fund.

Ruby Mills, Ltd.—*contd.*

Mill : Dadar. **Phone :** 40926.

Spindles : **Ring,** 11,996. **Looms,** 365. **Hands,** 1,102.

Yarn Spun : 4s to 30s. **Cloth :** Grey and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton .. Stores .. Coal .. Electric Energy ..	22,42,563	Dyeing Charges	24,049
		Salaries and Wages ..	3,98,009
		Agents' Commission ..	*Nil.*
		Interest	34,861

Mill Staff. (*Copyright.*)

Manager	S. S. Cavarana.	Finisher and Dyer	H. C. Ghandhi.
Carding Master ..			
Spinning Master ..			
Weaving Master ..	H. C. Ghandhi.	Mechanical and Electrical Engineer ..	R. S. Soonavala.

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers ..	Taylor Lang & Co., Ltd.
Cards	Howard & Bullough Ltd.
Draw Frames	Do.
Roving Frames	Do.
Ring Frames	Asa Lees & Co., Ltd.
Winding and Warping ..	William Dickinson & Sons.
Sizing	Howard & Bullough Ltd.
Looms	Henry Livesey Ltd., and John Dugdale.
Finishing	Mather & Platt Ltd.
Dyeing	Country-made Jiggers.
Humidifiers	Drosophore Co.
Sprinklers	Mather & Platt Ltd.
Boilers	Tinker Shenton & Co.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

ASSUR VEERJEE MILLS, LTD.

Started 1896.

REGISTERED OFFICE :—COMMISSARIAT BUILDING, HORNBY ROAD, BOMBAY.

Telegrams : "EUCLID." Phone :

Directors :

Khimjee Assur.
Hon. Pheroze C. Sethna, O.B.E.
A. J. Raymond.
F. E. Dinshaw
H. F. Commissariat.
K. A. Dubash.

Agents :

H. F. Commissariat & Co.

Auditors :

S. B. Billimoria & Co.
Apaji, Amin & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 40,00,000 divided into 90,000 Cumulative 7 per cent. 1st Preference Shares of Rs. 10 each and 110,000 Cumulative 7 per cent. 2nd Preference Shares of Rs. 10 each and 20,000 Ordinary Shares of Rs. 100 each. Issued, Rs. 31,42,350.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	9,69,125	12,48,500	15,01,000	15,01,000	31,42,350
Debentures	6,00,000	6,00,000	4,00,000	2,01,000	15,00,000
Reserve & other Funds ..	50,925	2,62,245	5,11,885	6,43,725	*Nil.*
Land & Buildings ..	5,20,130	11,77,131	14,87,951	16,98,902	18,46,573
Plant & Machinery ..	8,49,784	9,21,486	23,96,997	28,62,566	36,04,548
Loss	*Nil.*	*Nil.*	*Nil.*	2,86,733	9,67,153
Profits	7,16,604	15,49,001	6,83,673	*Nil.*	*Nil.*
Dividend per Share .. (*Ordinary.*)	30	48	16	*Nil.*	*Nil.*

Assur Veerjee Mills, Ltd.—*contd.*

Mill : Lower Parel. **Phone :** 40934.

Spindles : Ring, 16,976 / Mule, 22,232 } 39,208. **Looms,** 600. **Hands,** 1,672.

Yarn Spun : 3s to 40s. **Cloth :** Grey, Bleached, and Coloured.

Principal Items of Expenditure for year ended 30th June, 1924.

	Rs.		Rs.
Cotton	23,99,544	Fuel and Electric Energy ..	1,33,997
Salaries and Wages at Mill and Office	5,31,412	Interest and Brokerage ..	3,73,858
Stores	2,24,200	Agents' Remuneration Rs. 32,000 *Less* waived .. 24,500	7,500

Mill Staff. (*Copyright.*)

Manager ..	K. N. Karanjia.	Mechanical Engineer (Assistant).	B. D. Rane.
Carding and Spinning Master.	Jehangir S. Engineer.	Electrical and Mechanical Engineer.	Dinshaw D. Mehta.
Weaving Master	P. P. Mehta.		

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers .. Cards .. .. .. Draw Frames .. .. Roving Frames .. .. Ring Frames .. .. .. Mules	Asa Lees & Co., Ltd., Oldham.
Winding and Warping	Universal Winding Co. and George Keighley, Ltd.
Sizing .. .. .. Looms	George Keighley & Co., Ltd.
Bleaching .. .. Finishing	Lang Bridge & Co., Ltd., Accrington.
Steam Turbine	Brown Boverie & Co.

JUBILEE MILLS LTD.

Started in 1888. Reconstructed in 1916.

REGISTERED OFFICE:—MUBARAK MANZIL, APOLLO STREET, FORT, BOMBAY.

Telegrams:—" " **Phone :** 20354.

Directors :
Mangaldas G. Parekh.
H. M. Mehta.
Chamanlal G. Parekh.
I. David.
Issa Soomar.
Mani H. M. Mehta.

Agents :
Mangaldas Mehta & Co.

Auditors :
Rustomjee E. Mistree.

Solicitors :
Mulla & Mulla.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 15,00,000 divided into 5,000 Preference Shares of Rs. 100 each and 10,000 Ordinary Shares of Rs. 100 each.
Issued, Rs. 15,00,000.

	1921.	1922.	1923.	1924.	1925.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	15,00,000	15,00,000	15,00,000	15,00,000	15,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans.. ..	13,74,414	19,12,000	28,12,000	32,61,000	35,00,000
Reserve Funds ..	25,00,000	28,30,000	29,75,000	29,75,000	29,75,000
Land & Buildings ..	12,62,300	13,42,600	15,11,000	15,36,000	15,50,000
Plant & Machinery..	38,62,000	39,73,000	42,90,000	44,27,000	44,87,000
Loss	*Nil.*	*Nil.*	2,27,000	1,70,000	2,30,000
Profits	7,11,000	4,26,000	*Nil.*	*Nil.*	*Nil.*
Dividend per share	25	25	*Nil.*	*Nil.*	*Nil.*

Jubilee Mills Ltd.—*contd.*

Mill: New Sewree. **Phone :** 40246.

Spindles : Ring, 36,132 / Mule, 3,120 } 39,252. **Looms,** 452. **Hands,** 1,030.

Yarn Spun : 24s to 40s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 30th June, 1924.

	Rs.		Rs.
Cotton	13,70,192	Salaries and Wages ..	3,74,429
Stores and Coloured Yarn ..	1,55,746	Agent's Remuneration (Waived on account of loss) ..	47,732
Coal and Electric Energy	76,824	Interest	1,45,895

Mill Staff. (*Copyright.*)

Manager ..	C. P. Sirkari.	Dyer	D. T. Joshi.
Carding and Spinning Master	R. N. Kavesmaneck.		
Weaving Master	S. D. Ghaswalla.	Mechanical Engineer ..	S. B. Pavri.

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers	Dobson & Barlow, Ltd.
Scutchers	Taylor, Lang & Co., Platt Bros., Howard & Bullough and Asa Lees & Co.
Cards	Tweedales & Smalley, Howard & Bullough and Dobson & Barlow, Ltd.
Draw Frames and Roving Frames ..	Tweedales & Smalley, Platt Bros., and Dobson & Barlow, Ltd.
Ring Frames	Tweedales & Smalley, Howard & Bullough, Brooks & Doxey and Dobson & Barlow, Ltd.
Winding and Warping Sizing and Looms	Hacking & Co.
Dyeing	Allen Bros.
Humidifiers	Clarke Sprinkler & Co.
Sprinklers	Mather & Platt.
Boilers	Hick, Hargreaves & Co. and Yates & Thom.
Electric Generators ..	British Westinghouse Electric & Manufacturing Co., Ltd.
Electric Motors ..	Metropolitan-Vickers, Ltd.

VICTORIA MILLS, LTD.

Started in 1860 ; wound up in 1898 ; sold in 1905 and reconstructed into VICTORIA MILLS, LTD., in 1913.

REGISTERED OFFICE :—123, ESPLANADE ROAD, FORT, BOMBAY.

Telegrams : " MULBERRY, BOMBAY." Phone : 24609.

Directors :

Mangaldas G. Parekh.
H. M. Mehta.
Chamanlal G. Parekh.
Essa Soomar.
Mani H. M. Mehta.

Agents :
Mangaldas, Mehta & Co.

Auditors :
Sorab S. Engineer.

Solicitors :
Mulla & Mulla.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 8,00,000 divided into 8,000 Ordinary Shares of Rs. 100 each. Issued, Rs. 8,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	8,00,000	8,00,000	8,00,000	8,00,000	8,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve & other Funds ..	10,71,942	12,71,942	16,72,171	16,73,722	16,57,325
Land & Buildings ..	2,50,759	2,75,362	2,98,329	2,98,329	2,99,827
Plant & Machinery ..	8,80,927	8,83,056	9,54,912	9,66,566	9,86,470
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	11,55,682	9,10,774	3,89,201	1,36,152	4,104
Dividend per Share ..	100	50	40	15	7½

Victoria Mills, Ltd.—*contd.*

Mill : Gamdevi. **Phone :** 41,453.

Spindles : Ring, 27,000. **Looms,** 556. **Hands,** 1,100.

Yarn Spun : 20s to 40s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1923.

	Rs.		Rs.
Cotton	14,73,879	Salaries and Wages at Mill and Office	4,57,572
Stores and Dyed Yarn ..	2,23,359	Agents' Remuneration ..	75,245
Coal	1,23,796		

Mill Staff. (*Copyright.*)

Superintendent and Manager	F. E. Regnaud.	Dyer	Y. M. Anaoker.
Carding Master ..	P. C. Lantin.	Mechanical Engineer ..	F. E. Regnaud.
Spinning Master ..	R. D. Merchant.		
Weaving Master ..	D. R. Mehta.		

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers ..	Platt Bros. & Co., Ltd.
Cards	Tweedales & Smalley and Ashworth Bros.
Draw Frames	Do.
Roving Frames	Do.
Ring Frames	Dobson & Barlow and Howard & Bullough.
Winding and Warping ..	Hacking & Co., Ltd., Bury.
Sizing	Do. and Felber Jucker.
Looms	Hacking & Co., Ltd., Bury.
Steam Engine	Hick Hargreaves & Co., Ltd.
Boilers	Do.

JAM MANUFACTURING CO., LTD.

REGISTERED OFFICE :—4, DALAL STREET, FORT, BOMBAY.

Telegrams :—"JAM MILLS." **Phone : 20215.**

Directors :

Ragavji Khimji.
Meghji Jeram.
Sunderdas Thakersey.
Vallabdas Raghavji.
Parshottam Mulji.
Jamnadas Kalianji.
Vithaldas Naranji.
Ratansey Hemraj.

Agents :

Walji Shamji & Co.

Auditors :

Rustomji N. Mehta & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 12,00,000 divided into 2,400 Ordinary Shares of Rs. 500 each. Issued, Rs. 12,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	12,00,000	12,00,000	12,00,000	12,00,000	12,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	3,143	3,976	2,890	12,835	2,171
Reserve Funds	3,55,000	5,30,000	6,45,000	8,45,000	8,55,000
Land & Buildings ..	5,33,391	5,19,391	5,10,392	5,34,732	5,46,077
Plant & Machinery ..	7,53,005	7,14,505	7,81,441	8,12,047	8,49,211
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	14,66,695	14,00,901	9,85,426	4,79,513	2,68,049
Dividend per Share ..	..	..	..	..	—

Jam Manufacturing Co., Ltd.—*contd.*

Mill : Lalbag, Parel. **Phone :** 40864.

Spindles : Ring, 30,520. **Looms,** 874. **Hands,** 1,302.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs		Rs.
Cotton	20,25,787	Wages	5,75,760
Stores	3,31,360	Agents' Commission ..	39,575
Coal	1,06,269	Interest	22,800

Mill Staff. (*Copyright.*)

Manager	.. D. R. Madan.	Weaving Master	.. C. M. Badshaw.
Carding and Spinning Master.	.. D. R. Madan.	Mechanical Engineer	.. S. B. Patel.

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers .. Cards	.. Lord Bros.
Draw Frames .. .. Roving Frames .. .. Ring Frames	.. Tweedales & Smalley, Ltd.
Winding and Warping .. Sizing .. .. .. Looms .. .. .. Finishing (folding) ..	.. Henry Livesey Ltd.
Humidifiers .. .. Sprinklers	.. Hoffman Sprinkler Co., Ltd.
Steam Engine .. .. Boilers	.. Hick Hargreaves & Co., Ltd.

NEW CHINA MILLS, LTD.

REGISTERED OFFICE:—265, HORNBY ROAD, FORT, BOMBAY.

Phone : Mill Phone.

Directors :

Pransukhlal Mafatlal.
Chandulal Achutlal.
Mafatlal Galghabhai.
Chandlal P. Parekh.

Managing Director :
Pransukhlal Mafatlal.

Auditors :
Apaji Amin & Co.

Solicitors :
Daphtary Ferreira and Divan.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 35,00,000 divided into 3,500 Ordinary Shares of Rs. 1,000 each. Issued, Rs. 13,25,000:

	1921.	1922.	1923.	1924.	1925.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	13,25,000	13,25,000	13,25,000	13,25,000	13,25,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	18,71,826	17,51,058	16,62,668	13,97,609	20,92,981
Reserve Funds.. ..	*Nil.*	*Nil.*	6,48,135	6,48,135	6,48,135
Land & Buildings ..	10,00,000	10,00,000	10,00,000	10,00,000	10,00,000
Plant & Machinery ..	22,50,725	22,50,725	22,50,935	22,50,935	22,50,935
Loss	*Nil.*	*Nil.*	50,160	7,119	1,49,908
Profits	4,68,723	35,791	*Nil.*	*Nil.*	*Nil.*
Dividend per share ..	———	———	*Not declared.*	———	———

New China Mills, Ltd:—*contd.*

Mill : Sewree. **Phone :** 40943.

Spindles : Ring, 13,032 / Mule, 33,032 } 46,064. **Looms,** *Nil.* **Hands,** 800.

Yarn Spun : Up to 30s.

Principal Items of Expenditure for year ended 31st March, 1925.

	Rs.		Rs.
Cotton, Waste, Yarn, etc..	9,14,692	Wages and Salaries ..	1,37,933
Stores and Spares.. ..	55,216	Interest	82,702
Coal	30,223		

Mill Staff. (*Copyright.*)

Manager	R. E. Madan.	Spinning Master ..	R. E. Madan.
Assistant Carding Master	G. R. Gandhi.	Mechanical and Electrical Engineer	J. H. Warden.

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers	Taylor Lang & Co., Ltd., Stalybridge.
Cards	Howard & Bullough Ltd.
Draw Frames	
Roving Frames	
Ring Frames	
Mules	Taylor Lang & Co., Ltd., Stalybridge.
Humidifiers	Mather & Platt, Ltd., Manchester.
Sprinklers	
Steam Engine	Benjamin Goodfellow and Browett-Lindley.
Boilers	Tinker Shenton & Co., Hyde.
Electric Generators	Lancaster & Co., Siemens Bros. Dynamo Works and The British Westinghouse Electric & Manufacturing Co.

PHŒNIX MILLS, LTD.

Started in 1889 as BRITANNIA MILL. Reconstructed as PHŒNIX in 1905.

REGISTERED OFFICE :—143, ESPLANADE ROAD, FORT, BOMBAY.

Phone : 25103.

Directors :

Sir Sassoon David, Bart., K.C.S.I.
Jamsetjee Ardaseer Wadia.
Sir Jamsetjee Jeejeebhoy, Bart., K.C.S.I.
F. E. Dinshaw.
Ramnarain Hurnandrai.

Agents :

Ramnarain Hurnandrai & Sons.

Auditors :

Manekjee Hormusjee Davur.
S. B. Billimoria & Co.

Solicitors :

Payne & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 8,00,000 divided into 8,000 Ordinary Shares of Rs. 100 each. Issued Capital, Rs. 8,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	8,00,000	8,00,000	8,00,000	8,00,000	8,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	8,02,407	7,04,117	9,05,353	19,17,096	8,79,022
Reserve Funds	18,64,725	27,64,725	35,94,331	38,94,331	39,94,331
Land & Building ..	9,07,955	9,53,455	10,80,212	11,43,697	11,15,524
Plant & Machinery ..	15,27,094	15,58,136	15,32,671	15,17,233	15,01,410
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	25,97,715	23,96,454	19,04,382	5,70,550	2,98,881
Dividend per share ..	160	175	140	45	30

Phœnix Mills.—*contd.*

Mill: Ferguson Road. **Phone**: 40877.

Spindles: Ring, 33,664 / Mule, 18,836 } 52,500. **Looms**, 696. **Hands**, 2,400.

Yarn Spun: 6s to 22s. **Cloth**: Grey and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	51,24,575	Salaries and Wages ..	8,67,406
Stores	3,40,579	Office Establishment ..	24,000
Coal	38,255	Agents' Remuneration ..	33,209
Electric Energy	1,20,395	Interest	79,709

Due to Hurnandrai Ramnarain, Rs. 2,81,513.

Mill Staff. (*Copyright.*)

Manager ..	.. D. M. Broacha.	Weaving Master	.. Ezra Sion.
Carding Master	.. S. D. Naigaumwala.	Mechanical and Elect. Engineer	.. D. M. Broacha.
Spinning Master	.. N. P. Kharas.		

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers ..	Asa Lees & Co., Crighton & Sons and Platt Bros.
Cards	Asa Lees & Co., Tweedale & Smalley and Elijah Ashworth.
Drawing Frames	Asa Lees & Co. and Tweedale & Smalley.
Roving Frames	Tweedale & Smalley.
Ring Frames	Platt Bros. & Co. and Tweedale & Smalley.
Mules	Asa Lees & Co., Ltd., Oldham.
Winding	Butterworth & Dickinson.
Warping / Sizing	Howard & Bullough Ltd.
Looms	Butterworth & Dickinson and Geo. Hattersley & Sons, Ltd. (also Japanese Looms).
Finishing Humidifiers ..	Mather & Platt, Ltd., Manchester.
Sprinklers	George Mills & Co., Ltd., Radcliffe.
Boilers	Yates & Thom, Ltd., and John Thompson.
Electric Generators / Electric Motors ..	Metropolitan-Vickers Electrical Co., Ltd.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

MORARJI GOCULDAS SPG. & WVG. CO., LTD.

Started in 1870.

REGISTERED OFFICE :—SUDAMA HOUSE, BALLARD ESTATE, BOMBAY.

Directors :
Narottam Morarji.
Ratansi Dharamsi Morarjee.
F. E. Dinshaw.
Trikamdas Dharamsi Morarji.
T. R. N. Cama.
Madhavji D. Morarji.
Ambalal Sarabhai.
A. J. Raymond.

Agents :
Morarji Goculdas & Co.

Accountant :
P. N. Nabar.

Auditors :
K. S. Aiyar & Co.
Devidass Vithaldass.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 12,00,000 divided into 1,200 Ordinary Shares of Rs. 1,000 each. Issued, Rs. 11,50,000.

	1921.	1922.	1923.	1924.	1925.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ...	11,50,000	11,50,000	11,50,000	11,50,000	11,50,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	64,71,961	53,88,205	56,90,587	94,05,329	81,25,518
Reserve Fund	23,41,243	32,41,243	48,35,000	49,10,000	49,10,000
Land & Buildings ...	35,67,187	43,22,951	46,30,856	47,47,883	48,35,556
Plant & Machinery ...	44,03,162	52,11,786	67,13,774	71,87,485	72,33,985
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	28,94,307	25,56,240	11,42,651	4,21,308	5,67,889
Dividend per Share ...	850	*900	450	125	135

*Including Rs. 100 as bonus.

Morarji Goculdas Spg. & Wvg. Co., Ltd.—*contd.*

Mill : Supari Baug, Parel. **Phone :** 40855.

Spindles : Ring, 82,532. **Looms,** 1,607. **Hands,** 4,600.

Cloth : Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 30th June, 1924.

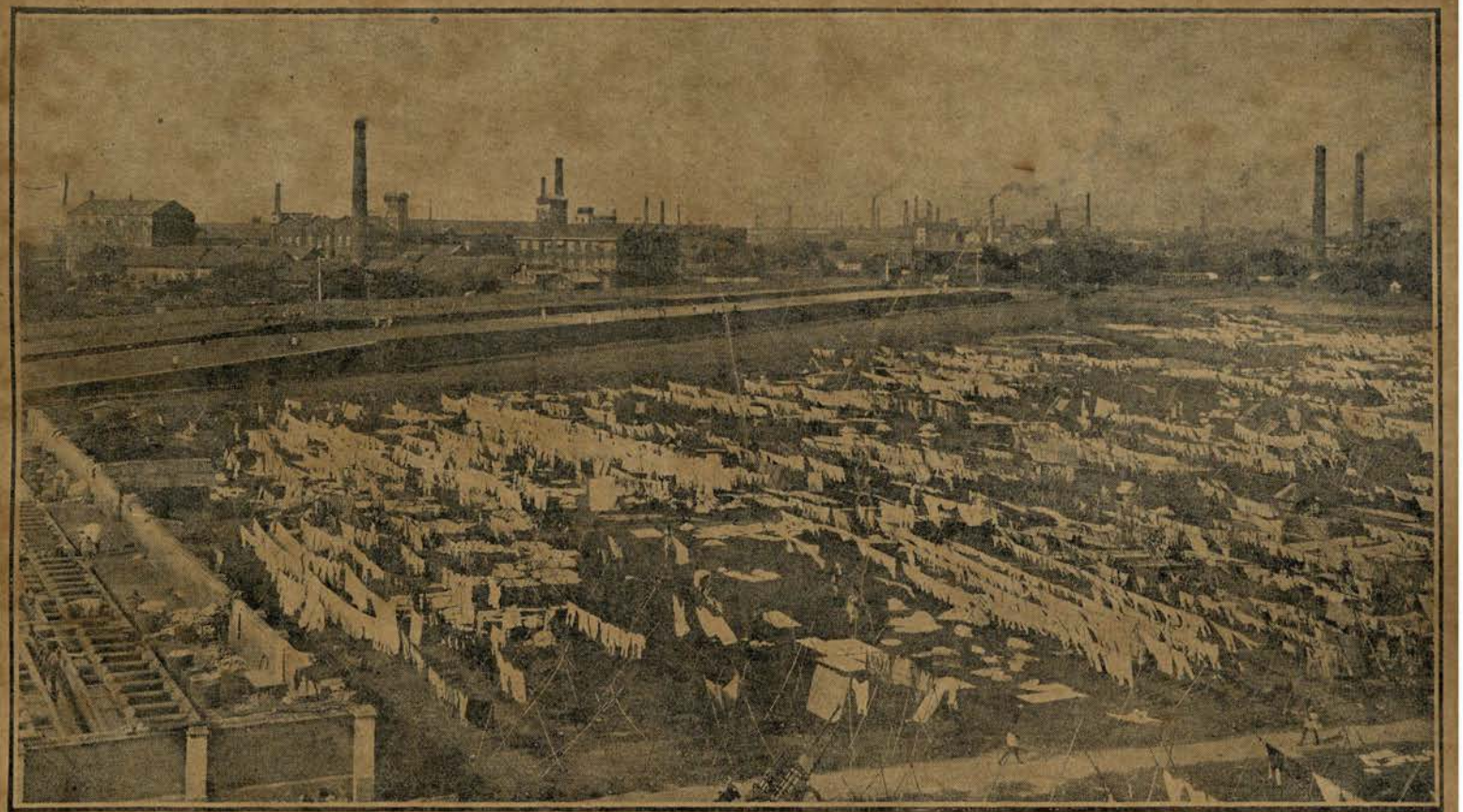
	Rs.		Rs.
Cotton	48,91,137	Salaries and Wages at Mill and Office	16,62,427
Yarn	28,312	Agents' Remuneration	48,277
Stores and Spare Parts	8,13,570	Interest and Brokerage	3,74,191
Coal and Electric Energy	3,63,036		

Mill Staff. *(Copyright).*

Manager	H. D. Kapadia.	Finisher and Dyer	V. G. Nair, M.Sc. (Manchester).
Carding and Spinning Master	S. S. Kolhatker.	Mechanical and Electrical Engineer	M. E. Haskell.
Weaving Master	D. P. Joshi, B.A.		

Plant & Machinery.	Suppliers. *(Copyright.)*
Openers and Scutchers	Platt Brothers & Co., Ltd.
Cards	Platt Bros. Elijah Ashworth and Tweedale & Smalley.
Drawing Frames, Roving Frames, Ring Frames	Platt Bros. & Co. and Brooks & Doxey.
Winding and Warping	Brooks & Doxey, Arundel Coulthard, Wm. Dickinson and Butterworth & Dickinson.
Sizing	Howard & Bullough, Brooks & Doxey, Arundel Coulthard, Wm. Dickinson and Butterworth & Dickinson.
Looms	George Hodgson, Ltd., Arundel Coulthard, Wm. Dickinson and Butterworth & Dickinson.
Bleaching	J. H. Riley & Co., Ltd.
Finishing	Do. and Mather & Platt.
Dyeing	Do.
Humidifiers	
Sprinklers	Mather & Platt and Hoffmann Sprinkler Co.
Boilers	Galloways, Ltd. and Thomas Beeley & Son.
Electric Motors	Metropolitan-Vickers, British Thomson-Houston, Siemens (India), Ltd. and Mather & Platt.

Mill driven electrically by the Tata Hydro-Electric Power Supply.



THE MILL INDUSTRY IN BOMBAY—1925. [*Photo Copyright.*

Panoramic view of the Mahâluxmi and Haines Road group of mills with the Dhobi-Ghat (Municipal Wash-houses) in the foreground.

THE LATE
MR. GOVINDJEE THACKERSEY MOOLJI.

THE LATE
SIR VITHALDAS DAMODHUR THACKERSEY, KT.

THE LATE
MR. DAMODHUR THACKERSEY MOOLJI

Late Partners in the Firm of Messrs. Thackersey Moolji & Co.
The largest Millowners and Agents in the Hindu community.

HINDOOSTAN SPG. AND WVG. MILLS CO., LTD.

Started in 1873.

REGISTERED OFFICE :—16, APOLLO STREET, FORT, BOMBAY.

Telegrams : " DRAGONADE," BOMBAY. Phone : 20110.

Directors :

Hon. Munmohundas Ramjee.
Hargovandas Jamnadas Ramjee.
Madhavjee Damodher Thakersey.
Vasanjee Vithaldas.

Agents :

Thakersey Mooljee & Co.

Auditors :

K. S. Aiyar & Co.
Devidas Vithaldas.

Solicitors :

Payne & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 12,00,000 divided into 1,200 Ordinary Shares of Rs. 1,000 each. Issued, Rs. 12,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	12,00,000	12,00,000	12,00,000	12,00,000	12,00,000
Debenture ..	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve Funds*	18,42,073	20,87,073	25,87,073	31,32,073	35,47,073
Land & Building ..	5,79,016	5,85,107	11,04,204	12,87,946	13,80,711
Plant & Machinery ..	16,75,941	17,64,397	21,22,198	34,67,362	36,75,505
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	9,34,572	11,43,151	12,41,063	7,40,180	2,69,823
Dividend per Share ..	300	400	400	200	75

* The Reserve Funds include Dividend Funds, Machinery and Building Depreciation and other funds.

Hindoostan Spg. and Wvg. Mills Co., Ltd.—*contd.*

Mill : Ripon Road. Phone : 40810.

Spindles : Ring, 38,272 / Mule, 2,784 } 41,056. Looms, 1,167. Hands, 1,800.

Yarn Spun : 11½s to 36s. Cloth : Grey and Fancy.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	21,87,499	Salaries and Wages at Mill and Office	5,78,320
Stores	2,19,599	Agents' Remuneration ..	48,000
Coal	95,990	Interest	44,719
Electric Energy	35,056		

Mill Staff. (*Copyright.*)

Manager	K. F. Shaha.	Dyer	G. R. Sule.
Carding and Spinning Master	A. K. Master.	Mechanical and Electrical Engineer	F. R. Bangalee.
Weaving Master ..	N. G. Desai.		

Plant and Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers ..	Tweedale & Smalley, Howard & Bullough and Platt Bros.
Cards	Do. do.
Drawing Frames, Roving Frames, Ring Frames ..	Do. do.
Mules	Asa Lees & Co., Ltd., Oldham.
Winding and Warping ..	Howard & Bullough, Ltd. and Henry Livesey, Ltd.
Sizing	Do. and John Dugdale & Son.
Looms	Platt Bros., Henry Livesey, Butterworth & Dickinson and John Dugdale.
Humidifiers	Herbert Smethurst & Sons, Ltd., Hollinwood.
Sprinklers ("Grinnell") ..	Mather & Platt, Ltd., Manchester.
Steam Engine	J. and E. Wood.
Boilers	Thomas Beeley & Sons, Hyde.
Electric Motors	Metropolitan-Vickers Electric Co., Ltd.

Mills driven electrically by the Andhra Valley Power Supply.

WESTERN INDIA SPG. & MFG. CO., LTD.

Started in 1880.

REGISTERED OFFICE :—16, APOLLO STREET, FORT, BOMBAY.

Telegrams : " LOLLARDISAM," BOMBAY. Phone : 20110.

Directors :

Sir Lallubhai Samaldas, C.I.E.

Karsondas Dharamsey Soonderdas.

Madhowjee Damodher Thakersey.

Hargowandas Jamnadas Ramjee.

Agents :

Thakersey Mooljee Sons & Co.

Auditors :

K. S. Aiyar & Co.

Devidas Vithaldas.

Solicitors :

Payne & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 12,00,000 divided into 1,200 Ordinary Shares of Rs. 1,000 each. Issued Capital, Rs. 12,00,000.

	1921.	1922.	1923.	1924.	1925.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	12,00,000	12,00,000	12,00,000	12,00,000	12,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve Funds	21,25,959	26,63,959	31,08,959	33,88,959	33,88,959
Land & Building ..	5,60,140	10,29,931	13,34,290	14,23,443	14,91,100
Plant & Machinery ..	22,35,811	28,15,744	35,49,329	35,28,094	35,88,617
Loss	*Nil.*	*Nil.*	*Nil.*	58,726	*Nil.*
Profits	10,50,454	8,29,127	4,25,487	*Nil.*	2,68,757
Dividend per Share ..	300	250	100	*Nil.*	40

Western India Spg. & Mfg. Co., Ltd.—*contd.*

Mill : Kalachowky Road. **Phone :** 40813.

Spindles : Ring, 36,552 / Mule, 5,208 } 41,760. **Looms,** 977. **Hands,** 1,793.

Yarn Spun: 11½s to 36s. **Cloth :** Grey and Fancy.

Principal Items of Expenditure for year ended 31st March, 1925.

	Rs.		Rs.
Cotton	30,76,750	Salaries and Wage at Mill and Office	7,11,754
Stores	2,15,019	Agents' Office Allowance ..	18,000
Coal	36,191	Agents' Remuneration ..	30,000
Electric Energy	1,32,651	Interest	86,802

Mill Staff. (*Copyright.*)

Manager .. .. F. B. Billimoria.	Spinning Master .. V. R. Nadkarni.
Asst. Manager. .. J. M. Gandhi.	Weaving Master .. K. R. Pascol.
Carding Master .. N. J. Dhenugara.	Mech. Engineer .. M. M. Engineer.

Plant & Machinery.	Suppliers. (*Copyright.*)
Openers and Scutchers ..	Platt Bros., Howard & Bullough, Lord Bros. and Tweedale & Smalley.
Cards	Howard & Bullough and Tweedale & Smalley.
Drawing Frames ..	Tweedale & Smalley.
Roving Frames / Ring Frames ..	Do. and Howard & Bullough.
Mules	Asa Lees & Co., Ltd.
Winding and Warping ..	Howard & Bullough, Henry Livesey and John Dugdale.
Sizing	Do. and John Dugdale.
Looms	Butterworth & Dickinson, Henry Livesey, Platt Bros.
Finishing	Mather & Platt and J. H. Riley & Co.
Humidifiers	Mather & Platt.
Boilers	Thomas Beeley.
Electric Motors	British Westinghouse Electric & Mfg. Co., Ltd.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

A CONDOLENCE MEETING AT THE WESTERN INDIA MILLS IN 1899 ON THE OCCASION OF THE DEATH OF MR. GOVINDJEE THACKERSEY.
THE HON. MR. MANMOHANDAS RAMJI presided on the occasion.
Our photograph shows a loyal and sympathetic gathering of the Staff and Employees of the Mills under the Agency of Messrs. Thackersey Moolji & Co.

THE HON. MR. MANMOHANDAS RAMJI, J.P.

Mr. Manmohandas Ramji has been one of the most prominent of Bombay citizens and most active in furthering the influence and utility of the Indian Merchants' Chamber of which he has been the principal founder. He has been intimately associated with the success of the Hindustan Mills, the Indian Manufacturing Co., the Western India Mills and the New Kaiser-i-Hind Mills, and various other joint stock undertakings.

INDIAN MANUFACTURING CO., LTD.

Started in 1882.

REGISTERED OFFICE :—16, APOLLO STREET, FORT, BOMBAY.

Telephone : 20110.

Directors :

Hon. Munmohundas Ramjee.

Lukshmidas Vandravandas Ramjee.

Vussonjee Vithaldas.

Madhowjee Damodher Thakersey.

Agents :

Damodher Thakersey Mooljee & Co.

Auditors :

K. S. Aiyar & Co.

Devidas Vithaldas.

Solicitors :

Payne & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 12,00,000 divided into 1,200 Ordinary Shares of Rs. 1,000 each. Issued, Rs. 9,00,000.
(Whole shares 862 of Rs. 1,000 and half shares 76 of Rs. 500 each.)

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	9,00,000	9,00,000	9,00,000	9,00,000	9,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve Funds*	11,45,838	18,48,998	24,68,998	30,33,998	32,88,998
Land & Buildings ..	6,91,770	9,14,328	11,89,659	13,24,494	15,58,216
Plant & Machinery ..	14,03,152	15,76,565	19,36,225	28,56,588	36,99,517
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	11,47,680	11,44,317	10,65,234	4,83,774	2,50,965
Dividend per Share ..	300	400	400	200	75

* The Reserve Funds include Machinery and Building Depreciation Funds.

Indian Manufacturing Co., Ltd.—*contd.*

Mill : Ripon Road. **Phone :** 40848.

Spindles : Ring, 41,328. **Looms,** 960. **Hands,** 1,779.

Yarn Spun : 10s to 42s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	15,74,837	Salaries and Wages at Mill and Office	5,94,771
Yarn	1,78,568	Agents' Allowance and Remuneration	48,000
Stores	1,62,582	Interest	95,682
Coal and Oil	1,05,390		

Mill Staff. (*Copyright.*)

Manager	U. N. Mehta.	Finisher, Bleacher and Dyer	D. J. Bahadurji.
Carding and Spinning Master	F. R. Khory.	Mechanical and Electrical Engineer	F. D. Kapadia.
Weaving Master	A. K. Thakore.		

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers, Cards	Howard & Bullough, Platt Bros. and Tweedale & Smalley.
Drawing Frames	Tweedale & Smalley.
Roving Frames, Ring Frames	Tweedale & Smalley and Platt Bros.
Winding and Warping ..	Howard & Bullough and Universal Winding Co.
Sizing	Do. do. do.
Looms	Pemberton & Sons.
Bleaching	Mather & Platt and J. H. Riley & Co.
Dyeing	Do. and H. Gebauer.
Humidifiers, Sprinklers	Mather & Platt.
Steam Engine	J. & E. Wood and Yates & Thom.
Boilers	Babcock & Wilcox.
Electric Generators, Electric Motors ..	English Electric Co.

The Weaving Department is driven electrically by the Mill Generators.

NEW KAISER-I-HIND SPG. & WVG. CO., LTD.

Started in 1876 as the NURSEY MILLS and wound up in 1880. Reconstructed in 1882 as the NEW KAISER-I-HIND.

REGISTERED OFFICE :—15, ELPHINSTONE CIRCLE, FORT, BOMBAY.

Telegrams : "GORUPDEO," BOMBAY. Phone : 20181.

Directors :

Hon. Munmohandas Ramji, J.P.
Hurgovundas Jamnadas Ramji.
Jethabhai Moolji.
Pranjivandas Vussonjee.
Luxmidas Vundravandas.
Jamnadas Vussonjee, J.P.
Raghavji Khimji.
Keshavji Morarji.
Jairaj Vussonjee.
Gopaldas Nathoobhai.

Agents :
Vussonjee Munjee & Co.

Auditors :
S. B. Billimoria & Co.

Secretary :
Manockji Sorabji Master.

Solicitors :
Madhavjee & Co.

Financial Position.

Authorised Capital, Rs. 36,00,000 divided into 7,200 Ordinary Shares of Rs. 500 each. Issued, Rs. 9,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	9,00,000	9,00,000	9,00,000	9,00,000	9,00,000
Debentures	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt	9,92,128	9,52,118	16,15,823	21,01,583	21,37,786
Reserve Fund	15,81,860	23,26,860	29,01,860	29,19,860	30,21,860
Land and Buildings ..	5,52,237	8,07,013	10,35,701	11,81,687	13,07,944
Plant and Machinery ..	12,76,475	15,70,947	17,61,393	26,17,667	28,88,774
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	12,84,517	11,67,825	65,432	97,125	2,73,579
Dividend per Share ..	200	225	25	*Nil.*	50

New Kaiser-i-Hind Spg. & Wvg. Co., Ltd.—*contd.*

Mill : Gorupdeo. Phone : 40844.

Spindles : Ring, 40,008 / Mule, 936 } 40,944. Looms, 1,104. Hands, 1,900.

Yarn Spun : 20s, 30s & 40s. Cloth : Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1925.

	Rs.		Rs.
Cotton	27,45,382	Salaries and Wages ..	8,02,967
Stores	4,35,077	Agents' Remuneration ..	30,393
Coal	68,347	Interest	1,39,711
Electric Energy ..	1,45,107		

Mill Staff. (*Copyright.*)

Carding and Spinning Master } D. H. Hathiram.

Weaving Master B. B. Desai.

Finisher and Dyer } .. .. B. G. Shah.

Mechanical Engineer .. K. F. Kapadia.

Electrical Engineer .. F. Dias.

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers ..	Taylor, Lang & Co., Ltd., Stalybridge.
Cards .. .. / Drawing Frames .. / Roving Frames .. / Ring Frames ..	.. Tweedales & Smalley, Ltd., Castleton.
Mules	Taylor, Lang & Co., Ltd.
Winding and Warping ..	John Dugdale & Co., Lancaster & Co. & Thomas Holt.
Sizing	Howard & Bullough, Ltd. and Lancaster & Co.
Looms	Robert Hall, John Dugdale, Lancaster & Co., and Pemberton & Sons, Ltd.
Bleaching and Finishing ..	F. R. Gebauer.
Dyeing	(Jiggers made in Bombay).
Humidifiers	Ingersoll Rand (India), Ltd.
Sprinklers	Mather & Platt, Ltd., Manchester.
Boilers	James Howden, Ltd. and G. Ingliss & Co.
Electric Motors	Metropolitan-Vickers Electric Co.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

CROWN SPINNING AND MANUFACTURING CO., LTD.

Started as The DHUN MILLS in 1884. Reconstructed into CROWN in 1902.

REGISTERED OFFICE :—16, APOLLO STREET, FORT, BOMBAY.

Telegrams : " VITALITY," BOMBAY. Phone : 20371.

Directors :
Cowasjee Dorabjee Panday.
Madhavjee Damodher Thackersey.
Rustam K. R. Cama.
Damodher Govindjee Madhowjee.

Agents :
Purshotam Vithaldas & Co.

Auditors :
Devidas Vithaldas.

Solicitors :
Payne & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 24,00,000 divided into 4,800 Ordinary Shares of Rs. 500 each. Issued, Rs. 2,00,000.

	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	*6,00,000 †2,00,000	*6,00,000 †2,00,000	†2,00,000	†2,00,000	†2,00,000
Debentures	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve Funds	9,11,000	15,11,000	21,11,000	22,11,000	22,11,000
Building Depreciation Fund	52,000	67,000	97,000	1,27,000	1,57,000
Manchinery Depreciation Fund	6,27,000	7,07,000	8,07,000	9,16,000	10,01,000
Land & Building ..	3,76,128	10,77,163	13,95,262	14,35,380	14,71,237
Plant & Machinery ..	10,23,494	13,65,218	22,29,545	22,67,416	22,92,398
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	14,72,757	14,78,800	6,26,737	1,87,106	4,48,824
Dividend per Share ..	*35 †1,285	*35 †1,035	*17½ †635	180	750

* Preference. † Ordinary.

Crown Spg. & Mfg. Co., Ltd.—*contd.*

Mill : New Parbhadevi Road. **Phone :** 41007.

Spindles : Ring, 35,288 / Mule, 6,480 } 41,768. **Looms,** 968. **Hands,** 1,700.

Yarn Spun : 10s to 34s. **Cloth :** Grey.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	28,03,324	Salaries and Wages ..	6,21,760
Stores	2,91,639	Agents' Remuneration ..	51,486
Coal	38,293	Interest	63,000
Electric Energy	1,11,567		

Mill Staff. *(Copyright.)*

Manager ..	Anandram Veljee.	Weaving Master ..	S.S. Dastur Kamdin.
Carding and Spinning Master ..	K. M. Saklatvala.	Mechanical and Electrical Engineer ..	N. B. Katrak.

Plant & Machinery. — Suppliers. *(Copyright.)*

Openers and Scutchers ..	Platt Bros & Co., Ltd., Oldham.
Cards	Tweedales & Smalley and Howard & Bullough.
Drawing Frames / Roving Frames	Do.
Ring Frames	Do. Howard & Bullough, Ltd.
Mules	Asa Lees & Co., Ltd., Oldham.
Winding and Warping ..	Howard & Bullough and Henry Livesey.
Sizing	Do.
Looms	Henry Livesey, Ltd., Blackburn.
Humidifiers .. / Sprinklers	Mather & Platt, Ltd., Manchester.
Boilers	Hick, Hargreaves & Co. and Thomas Beeley.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

KHATAU MAKANJI SPG. & WVG. CO., LTD.

Started in 1874.

REGISTERED OFFICE :—BALLARD PIER, FORT, BOMBAY.

Telegrams : "CRAFTSMAN." Phone : 20093.

Directors :

S. E. Warden.
Mulraj Khatau.
C.A. Latif.
Morarji Mulraj Khatau.
Tulsidas Gordhandas.
J. B. Bomn Beheram.
F. E. Dinshaw.

Agents :

Khatau Makanji & Co.

Auditors :

K. S. Aiyar & Co.
Sorab S. Engineer & Co.

Solicitors :

Craigie, Blunt & Caroe.

Secretary :

R. A. Turkhad.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 30,00,000 divided into 10,000 Preference shares of Rs. 100 each and 20,000 Ordinary shares of Rs. 100 each.
Issued, Rs. 30,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	30,00,000	30,00,000	30,00,000	30,00,000	30,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	33,61,157	59,70,394	80,59,807	85,74,153	1,01,72,165
Reserve Funds	51,33,742	58,68,742	61,03,742	61,83,690	61,29,720
Land & Building ..	18,29,557	21,12,850	23,12,790	25,17,229	33,00,803
Plant & Machinery ..	25,07,902	29,65,932	48,28,259	52,68,056	59,55,880
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	14,02,156	15,99,195	7,55,630	4,92,945	99,264
Dividend per Share ..	70	85	50	20	6

Khatau Makanji Spg. & Wvg. Co., Ltd.—*contd.*

Mill : Haines Road, Byculla. **Phone :** 40867.

Spindles : Ring, 62,844. **Looms,** 1,512. **Hands,** 2,985.

Yarn Spun : 6½s to 60s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 30th June, 1925.

	Rs.		Rs.
Cotton	32,79,661	Salaries and Wages ..	13,80,513
Stores	9,73,508	Agents' Remuneration ..	18,000
Coal, Liquid Fuel and Electric Energy	2,060,84	Interest	4,67,726

Mill Staff. (*Copyright.*)

Manager ..	John Pilling.	Bleach. & Dyeing	H. Daulat Jhada.
Asstt : ..	M. S. Bhamgara.	Bleacher ..	Keshavrao Tambut
Carding Master ..	P. R. Surti.	Dyer	A. M. Sapre.
Spinning Master ..	Gopal Daji.	Mech. Engineer ..	R. E. Arjania.
Weaving Master ..	K. P. Engineer.	Elect. Engineer ..	M. R. Pillay.
		Diesel Engineer ..	Wamanrao Vithoba

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers ..	Lord Bros., J. Hetherington, Asa Lees & Co., Platt Bros., Howard & Bullough and Dobson & Barlow.
Cards	Asa Lees & Co., Tweedales & Smalley, John Hetherington, Howard & Bullough and Dobson & Barlow.
Draw Frames	Tweedales & Smalley and Dobson & Barlow.
Roving Frames	Tweedales & Smalley, Dobson & Barlow and Curtis Bros.
Ring Frames	Brooks & Doxey, Platt Bros., Tweedales & Smalley and Howard & Bullough.
Winding and Warping ..	George Keighley, John Dugdale and Henry Livesey.
Sizing	Butterworth & Dickinson, and George Keighley.
Looms	Butterworth & Dickinson and Platt Bros.
Bleaching	Mather & Platt, Ltd.
Finishing	Mather & Platt, J. H. Riley and C. G. Haubold.
Dyeing	C. G. Haubold and F. R. Gaubeur.
Humidifiers, Sprinklers	Mather & Platt.
Steam Engine, Boilers ..	John Musgrave & Sons.
Electric Generators ..	General Electric Co. and Brown Boweri & Co.
Electric Motors	General Electric Co., Wagner and S. S. N.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

MADHOWJI DHARAMSI MANUFACTURING CO., LTD.

Started in 1872 as JADHOWJI MILLS, converted into MADHOWJI DHARAMSI in 1894.

REGISTERED OFFICE:—COMMISSARIAT BUILDING, HORNBY ROAD, BOMBAY.

Directors :
F. E. Dinshaw.
A. J. Raymond.
Hon'ble Sir Phiroze Sethna, O.B.E.
Ambalal Sarabhai.

Agents :
Goculdas Madhowji Sons & Co.

Solicitor :
Payne & Co.,

Auditors :
A. F. Ferguson & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 21,75,000 divided into 2,700 Preference Shares of Rs. 250 each and 15,000 Ordinary Shares of Rs. 100 each.

Issued { 13,500 Shares (Ordinary) of Rs. 100 each=Rs. 13,50,000.
2,700 Shares (6 % Cum. Preference) of Rs. 250 each=Rs. 6,75,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ...	20,23,250	20,23,500	20,23,500	20,23,750	20,23,750
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve Funds	14,12,369	29,12,369	34,62,369	38,43,791	38,43,844
Building & Plant ...	31,83,616	40,63,118	57,29,595	68,67,470	74,84,461
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	28,62,115	20,63,770	17,01,095	6,02,206	1,78,701
*Dividend per Share ...	100	90	60	30	*Nil.*

* Also 6% on Preference Shares from 1920 to 1923.

Madhowji Dharamsi Manufacturing Co., Ltd.—*contd.*

Mill : Foras Road. **Phone :** 42807.

Spindles : Ring, 35,516 / Mule, 2,296 } 37,812. **Looms,** 903. **Hands,** 2,837.

Yarn Spun : Up to 40s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	22,60,004	Salaries and Wages at Mill and Office	11,11,621
Stores	6,92,130	Office Allowance	24,000
Coal, Liquid Fuel and Electric Energy ..	3,83,834	Agents' Remuneration ..	35,000
		Interest	3,46,313

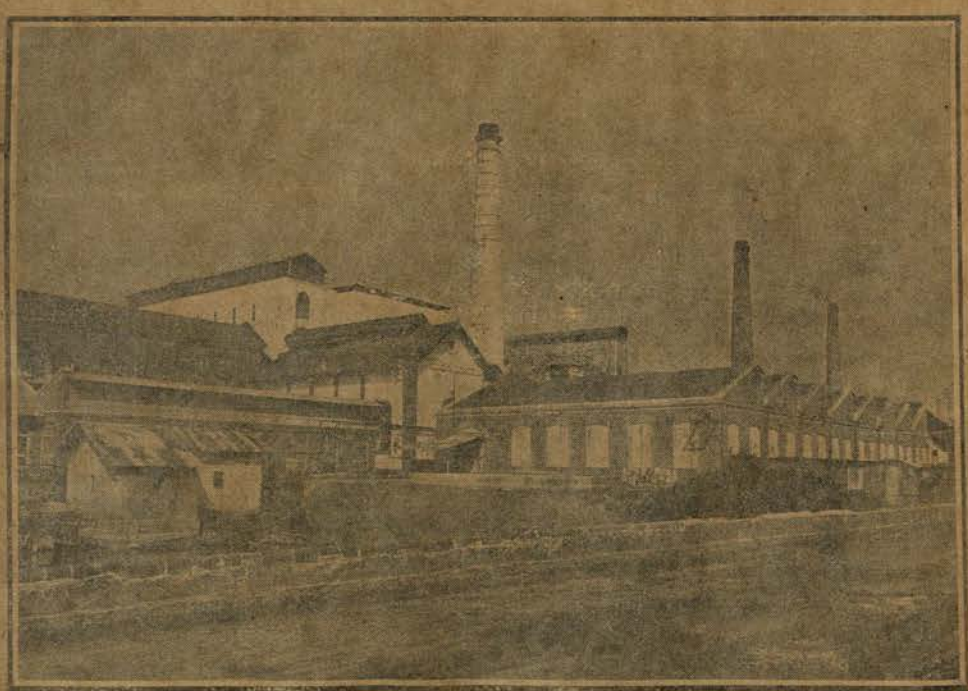
Mill Staff. (*Copyright.*)

Manager	D. A. Tata.	Finisher and Dyer ..	H. Huggins. / V. A. Deodhar.
Carding and Spinning Master ..	H. Kemp.	Elect. Engineer ..	U. P. Roy.
Weaving Master ..	P. H. Godbole.		

Plant & Machinery.	Suppliers. (*Copyright.*)
Openers and Scutchers ..	Tweedales & Smalley, Asa Lees & Co., Platt Bros.
Cards, Drawing Frames ..	Do. Howard & Bullough.
Roving Frames, Ring Frames	Do.
Mules	Dobson & Barlow, Ltd., Bolton.
Winding and Warping ..	Howard & Bullough, William Dickinson and Harling & Todd.
Sizing	Howard & Bullough and William Dickinson.
Looms	Butterworth & Dickinson, Felber Jucker & Co., and Wm. Dickinson & Sons.
Bleaching	Mather & Platt, Ltd.
Finishing	Do. Harling & Todd.
Dyeing	J. H. Riley & Co., Mather & Platt, Ltd., and Franklin Process Co.
Humidifiers	Herbert Smethurst & Sons, Ltd., Hollinwood.
Sprinklers	Mather & Platt, Ltd., Manchester.
Steam Engine (*Not working*)	John Musgrave & Sons, Ltd., Bolton.
Boilers	Babcock & Wilcox, Ltd., Renfrew (Scotland).
Electric Generators ..	Mather & Platt, Ltd., Manchester.
Electric Motors ..	Do. and Metropolitan-Vickers.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

THE BIRLA MILLS. (Formerly Indo China.)



THE JUBILEE MILLS. [Architects : Messrs. Taraporewala and Bharucha.

The Sewri Group of Mills including The Jubilee, Birla, Swan and New China.

THE PAREL GROUP OF COTTON MILLS AND THE G. I. P. RAILWAY WORKSHOPS. [Photo: Copyright.

SIR SHAPURJI BROACHA MILLS, LTD.

Includes:—CONNAUGHT and EMPRESS MILLS started in 1883 and the NEW EMPRESS in 1895. The three mills were formed into SIR SHAPURJI BROACHA MILLS, LD. in 1916.

REGISTERED OFFICE :—COMMISSARIAT BUILDINGS, HORNBY ROAD, FORT, BOMBAY.

Telegrams : " SHAPURMILL," BOMBAY. Phone : 22266. 20168.

Directors :

F. E. Dinshaw.
A. J. Raymond.
F. G. Travers.
Ambalal Sarabhai.
Hon. Sir Phiroze Sethna, O.B.E.

Agents :

Mathradas Goculdas & Co.

Solicitors :

Payne & Co.

Auditors :

A. F. Ferguson & Co.
S. B. Billimoria & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 75,00,000 divided into 25,000 7% Cumulative Preference Shares of Rs. 100 each and 50,000 Ordinary Shares of Rs. 100 each.

Issued { 25,000 7% Cumulative Preference Shares of Rs. 100 each.
50,000 Ordinary Shares of Rs. 100 each.

	1920. Rs.	1921. Rs.	1922. Rs.	1923. Rs.	1924. Rs.
Paid-up Capital ..	68,64,270	74,89,345	74,94,195	74,94,695	74,94,695
Debenture	12,50,000	12,50,000	12,50,000	12,50,000	12,50,000
Debt Loans	40,52,365	41,16,102	9,38,848	26,85,760	42,81,913
Reserve Funds	75,470	12,25,070	12,25,070	18,25,070	15,25,070
Land & Building ..	21,70,414	19,21,511	21,95,409	21,91,968	23,97,641
Plant & Machinery ..	33,89,520	35,81,700	43,61,466	55,91,383	57,32,451
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	1,57,804
Profits	16,52,611	40,69,264	38,43,162	9,63,191	*Nil.*
Dividend { Per share ..	*25	*70	*45	*20	*Nil.*
Dividend { Per cent. ..	†7	†7	†7	†7	*Nil.*

* Ordinary Shares. † Preference Shares.

Sir Shapurji Broacha Mills, Ltd.—*contd.*

Mill : DeLisle Road. **Phone :** 40801.

Spindles : Ring, 95,412 / Mule, 1,872 } 97,284. **Looms,** 697. **Hands,** 3,966.

Yarn Spun : 2s to 50s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1925.

	Rs.		Rs.
Cotton	94,58,441	Salaries and Wages at Mill	16,96,733
Dyeing and Bleaching ..	3,06,313	Office Allowance	24,000
Stores	5,12,438	Agents' Remuneration ..	48,000
Coal and Liquid Fuel ..	1,78,282	(Waived on account of loss.)	
Electric Energy	1,72,952	Interest	2,99,491

Mill Staff. *(Copyright.)*

Manager	W. Taylor.	Weaving Master ..	V. T. Dhuri.
Carding and Spinning Masters	D. A. Wadia. S. K. Davar. J. Clegg.	Mechanical Engineer ..	K. E. Keyas.
		Electrical Engineer ..	U. P. Roy.

Plant & Machinery—Suppliers. *(Copyright.)*

Openers and Scutchers ..	Howard & Bullough, and Tweedale & Smalley.
Cards, Drawing Frames, Roving Frames, Ring Frames ..	Tweedale & Smalley and Howard & Bullough.
Mules	Platt Bros. & Co., Ltd.
Winding and Warping ..	Thomas Holt, Harling & Todd & Howard & Bullough.
Sizing	Robert Hall & Sons, Howard & Bullough and Wm. Dickinson.
Looms	Henry Livesey, Hacking & Co., Robert Hall, Harling & Todd, Butterworth & Dickinson and Wilson & Longbottom, Ltd.
Humidifiers	Textile Illuminating Engineering Co., Ltd.
Sprinklers	Herbert Smethurst & Sons.
Steam Engine	Yates and Thom.
Boilers	Tinker Shenton.
Electric Generators ..	J. P. Hall.
Electric Motors	Mather & Platt and Metropolitan-Vickers, Ltd.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

PRESIDENCY MILLS CO., LTD.

Started in 1886.

REGISTERED OFFICE :—10, BANK STREET, FORT, BOMBAY.

Telegrams : " SOLEMNITY," BOMBAY. Phone : 20168.

Directors :

Motilal Kanji.
Ragavji Khimjee.
Dwarkadas Runchordas.
Mooljee Haridas.
Maganlal Parbhudas.

Agents :

Rãgavji Maganlal & Co.

Auditors :

C. H. Soparivalla & Co.

Solicitors :

Daphtary Ferreira & Divan.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 12,00,000 divided into 9,600 Ordinary shares of Rs. 125 each. Issued, Rs. 12,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	12,00,000	12,00,000	12,00,000	12,00,000	12,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	*Nil*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve Funds	53,450	53,450	53,450	53,450	53,450
Renewal of Machinery ..	*Nil.*	1,25,000	1,70,000	1,70,000	1,70,000
Land & Buildings ..	7,72,745	7,80,501	9,69,006	9,84,805	10,05,540
Plant & Machinery ..	15,29,489	17,68,982	20,66,769	21,59,415	22,41,568
Loss	*Nil.*	*Nil.*	*Nil.*	19,791	2,77,067
Profits	7,27,117	8,59,107	4,16,224	*Nil.*	*Nil.*
Dividend per Share ..	50	50	25	*Nil.*	*Nil.*

Presidency Mills Co., Ltd.—*contd.*

Mill : Ferguson Road. **Phone :** 40890.

Spindles : Ring, 31,484 / Mule, 1,140 } 32,624; **Looms,** 840. **Hands,** 1,600.

Yarn Spun : **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	13,49,587	Salaries and Wages at Mill and Office	5,37,554
Stores	2,15,702	Agents' Remuneration (Waived voluntarily.)	23,657
Coal	1,21,983	Interest	1,17,751

Mill Staff. (*Copyright.*)

Manager	R. G. Hardman.	Finisher and Dyer	V. C. Karve.
Carding and Spinning Master	R. V. Kulkarni.	Mechanical Engineer	K. M. Mehta.
Weaving Master	L. V. Atarvala.		

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers	Tweedales & Smalley.
Cards	Howard & Bullough and Platt Bros. & Co.
Drawing Frames / Roving Frames	Platt Bros. & Co.
Ring Frames	Tweedales & Smalley and Platt Bros. & Co.
Mules	Taylor, Lang & Co.
Winding and Warping	Thomas Holt, Ltd.
Sizing	Howard & Bullough.
Looms	Platt Bros., Butterworth & Dickinson and Henry Livesey.
Bleaching, Finishing & Dyeing	Mather & Platt, Ltd.
Humidifiers / Sprinklers	Mather & Platt, Ltd.
Steam Engine	Hick, Hargreaves & Co., Ltd.
Boilers	Do. and Tinker Shenton & Co.

ALLIANCE COTTON MANUFACTURING CO., LTD.

Started in 1857 as BOMBAY THROSTLE and converted into the ALLIANCE in 1864.

REGISTERED OFFICE :—No. 73, APOLLO STREET, FORT, BOMBAY.

TELEGRAMS : "ALLIANCE," BOMBAY. OFFICE PHONE : 20104.

Directors :

Hon'ble Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E.
Tribhovandas Narotamdas Malvi.
Motilal Kanji.
Chamanlal G. Parekh.
Bhagwandas Hargovandas.
Manubhai Rangildas.
Harilal Dwarkadas Mody. (*Ex-officio.*)

Agents :

Morarbhai Vijbhukhandas & Co.

Solicitors :

Malvi, Mody, Ranchhoddas & Co.

Auditors :

K. S. Aiyar & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 7,00,000 divided into 7,000 Ordinary shares of Rs. 100 each. Issued, Rs. 7,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	7,00,000	7,00,000	7,00,000	7,00,000	7,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt	15,17,531	6,62,865	4,79,310	11,42,250	11,94,484
Funds	2,93,000	3,15,000	6,52,000	9,24,000	9,24,000
Land & Buildings ..	3,73,148	4,40,662	4,67,815	4,88,794	4,88,794
Plant & Machinery ..	11,94,537	17,96,712	19,95,667	20,85,423	21,72,568
Profits	5,05,588	5,08,676	4,45,756	*Nil.*	*Nil.*
Loss	*Nil.*	*Nil.*	*Nil.*	75,941	3,48,973
Dividend per Share ..	40	40	20	*Nil.*	*Nil.*

Alliance Cotton Manufacturing Co., Ltd.—*contd*

Mill : Tardeo. **Phone :** 40827.

Spindles : Ring, 26,616 / Mule, 1,500 } 28,116. **Looms,** 592. **Hands,** 1,300

Yarn Spun : **Cloth :** Grey, Bleached, and Coloured.

Principal Items of Expenditure for year ended 30th June, 1924.

	Rs.		Rs.
Cotton	12,33,713	Electric Energy	53,736
Salaries and wages at Mill and Office	4,50,421	Coal and Liquid Fuel ..	31,572
Stores	1,97,484	Agents' Remunetration (Waved voluntarily.) ..	65,017

Mill Staff. *(Copyright.)*

Manager	R. K. Misra.	Dyer	Chandrakant Banoo.
Carding and Spinning Master.	V. R. Manohar.	Mechanical Engineer.	Dadabhoy H. Bhathena.
Weaving Master. ..	B. D. Motiwalla.		

Plant & Machinery. Suppliers. *(Copyright.)*

Openers and Scutchers. .	Lord Bros., Platt Bros. and Howard & Bullough.
Cards / Draw Frames	Tweedales & Smalley and Platt Brothers.
Roving Frames	Tweedales & Smalley, Howard & Bullough and Platt Bros.
Ring Frames	Brooks & Doxey, Howard & Bullough, Platt Bros., Lord Bros. and Tweedales & Smalley.
Mules	Platt Bros.
Winding and Warping ..	Raffel Bros., Thos. Holt, W. Schlathorst, Platt Bros. and Hacking & Co.
Sizing	Henry Livesey, Hacking & Co. and Howard & Bullough.
Looms	Platt Bros., Hacking & Co., Wm. Dickinson, Henry Livesey and Robert Hall.
Finishing	John Downham & Co.
Humidifiers	Mather & Platt, Ltd.
Sprinklers	Hoffman Sprinkler Co.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

KILACHAND MILLS, LTD.

Started in 1889 as PEROO MAHOMED. Became CORONATION in 1902. Reformed into KILACHAND in 1920.

REGISTERED OFFICE :—55, APOLLO STREET, FORT, BOMBAY.

Phone : 22720.

Directors :

Sir Lalubhai Samaldas, C.I.E.
Hon'ble Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E.
Kikabhai Premchand.
Chandulal V. Divan.
Chhotalal Kilachand.
Nandlal Kilachand.
Rao Bahadur Kilachand Devchand.

Agents :

Kilachand Devchand & Co., Ld.

Auditors :

Chandabhoy & Jassoobhoy.

Solicitors :

Dephtary, Farreira & Divan.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 80,00,000 divided into 320,000 Ordinary Shares of Rs. 25 each. Issued, Rs. 41,25,000.

	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	38,98,515	40,27,970	40,33,445	39,85,600 47,845* 40,33,445
Debenture	20,00,000	19,00,000	*Nil.*	*Nil.*
Debt Loans	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve Funds	*Nil.*	7,57,500	15,15,500	18,04,500
Land & Building ..	15,46,500	16,05,359	16,09,927	16,17,399
Plant & Machinery ..	43,28,780	45,48,437	51,72,040	52,53,372
Loss	*Nil.*	*Nil.*	*Nil.*	3,209 53,557
Profits	12,52,106	12,39,775	5,49,988	*Nil.*
Dividend Per share ...	2-4-0	2-8-0	1-8-0	*Nil.*

* Forfeited shares.

Kilachand Mills, Ltd.—*contd.*

Mill : Haines Road. **Phone :** 40422.

Spindles : Ring, 31,824 / Mule, 12,022 } 43,846. **Looms,** *Nil.* **Hands,** 1,516.

Yarn Spun : 6s to 24s.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	23,24,743	Salaries and Wages ..	4,69,820
Stores	81,271	Agents' Remuneration ...	18,000
Coal	46,035		
Electric Energy	88,481	Interest	1,21,426

Mill Staff. *(Copyright.)*

Manager	S. P. Palkhiwala.	Carders ..	B. Damodar. / A. G. Shah.
Head Carding and Spinning Master.	R. R. Dalal.	Spinning Master ..	B. V. Desai.
		Engineer ..	Chhabildas Tribhovandas.

Plant & Machinery. Suppliers. *(Copyright.)*

Openers and Scutchers ..	Platt Brothers & Co., Ltd., Oldham.
Cards .. .. / Drawing Frames .. / Roving Frames .. / Ring Frames ..	Tweedales & Smalley, Ltd., Castleton.
Mules	Asa Lees & Co., Ltd., Oldham.
Humidifiers .. / Sprinklers	Mather & Platt, Ltd., Manchester.
Steam Engine .. / Boilers	Daniel Adamson & Sons.
Electric Motors	Metropolitan-Vickers.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

PLANET MILLS, Ltd.

Started in 1888 as the STAR MILLS; reconstructed as the VICTORY MILL in 1904 and rebuilt in 1917 as the PLANET after destruction by fire.

REGISTERED OFFICE :—168/72, Kalbadevi Road, BOMBAY.

Telegrams : "PLANMILL," BOMBAY. Phone : 24165.

Board of Directors :

Rai Bahadur Rajya Bhusan Sheth Kalyanmall Tillockchand.
Rai Bahadur Seth Kastoorchandji Onkerji.
Samirmalji A. Ajmera.
Hiralal C. Patni.
Hooseinbhoy Ahmedbhoy.
Gulamali G. Kurrimbhoy.
Ahmed Rahim
Kasamali Ahmed Rahim.

Agents :

Tillockchand Kalyanmal & Co.

Auditors :

A. F. Ferguson & Co.
S. B. Billimoria & Co.

Solicitors :

Malvi Mody Runchordas & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 30,00,000 divided into 15,000 Preference shares of Rs. 100 each and 15,000 Ordinary shares of Rs. 100 each. Issued, Rs. 21,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital, ..	15,00,000	15,00,000	15,00,000	15,00,000	15,00,000
Debenture	12,00,000	12,000,00	12,00,000	12,00,000	12,00,000
Debt Loans	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve Fund	1,00,000	1,40,000	5,20,000	6,80,000	90,000
Land & Buildings ..	5,53,000	8,03,000	11,37,000	14,23,000	15,31,000
Plant & Machinery ..	20,07,000	23,88,000	32,69,000	35,85,000	37,42,000
Loss	*Nil.*	*Nil.*	*Nil.*	1,18,595	4,92,865
Profits	4,20,000	10,08,235	10,07,231	*Nil.*	*Nil.*
Dividend Per share ..	12½	25	35	*Nil.*	*Nil.*

Planet Mills, Ltd.—*contd.*

Mill : Ferguson Road. **Phone :** 40164.

Spindles : Ring 29,100 / Mule 2,486 } 31,586. **Looms,** 929. **Hands,** 2,208.

Yarn Spun : 6s to 30s. **Cloth :** Grey, Bleached, and Coloured.

Principal Items of Expenditure for year ended 31st March 1924.

	Rs.		Rs.
Cotton	19,97,000	Salaries and Wages at Mill and Office Establishment.	8,25,000
Stores	3,75,000	Agents' Remuneration ..	18,000
Coal and Liquid Fuel	2,60,000	Interest	4,35,000

Mill Staff.

Manager	.. A. B. Hirji.	Finisher	.. Khursedji B. Boga.
Ag. Carding & Spinning Master	.. H. R. Jagasia.	Dyer	.. M. L. Dhuru.
Weaving Master.	.. S. V. Mudbhatkal.	Mechanical Engineer :	G. M. Tavde.

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers..	Lord Bros.
Cards	Tweedales & Smalley.
Draw Frames	Do. Do.
Roving Frames	Do. Do. and Brooks & Doxey.
Ring Frames	Tweedales & Smalley.
Mules	Do. Do.
Winding and Warping ..	Howard & Bullough, Wm. Dickinson and Universal Winding Co.
Sizing	Howard & Bullough.
Looms	Wm. Dickinson.
Bleaching, Finishing and Dyeing	J. H. Riley & Co., Ltd.
Sprinklers	Hoffmann Sprinkler Co.
Steam Engine	Hick Hargreaves & Co.
Boilers	Do. Do. and Thomas Beeley.

DIAMOND SPINNING AND WEAVING CO., LTD.

Started in 1892 as HOPE MILL. Converted into PROSPECT in 1913. Turned into DIAMOND in 1919.

REGISTERED OFFICE :—No. 16, APOLLO STREET, FORT, BOMBAY.
Telegrams : " KINKHAP, BOMBAY." Phone : 20713.

Directors :

A. J. Raymond.
Sir Cawasjee Jehangir, Bart.
Sir Hormusji Cowasji Dinshaw, Kt.
Hormusji R. Uhmrigar.
Kedarmal Bhuramal.
Gulabchand Devchand.

Agents :

Gulabchand Devchand & Co.

Auditors :

S. B. Billimoria & Co.
Devidas Vithaldas.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 1,00,00,000 divided into 50,000 Preference Shares of Rs. 100 each and 50,000 Ordinary Shares of Rs. 100 each.

Issued, Rs. 51,00,000 divided into 34,000 Ordinary Shares of Rs. 100 each, and 17,000 Preference Shares of Rs. 100 each.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	22,73,555	28,09,988	30,26,511	38,40,344	39,17,918
Depreciation Fund ..	1,00,000	2,05,000	4,10,000	6,20,000	6,20,000
Debt Loans	30,00,000	30,00,000	24,00,000	18,00,000	12,00,000
Reserve Funds	30,000	1,60,000	3,60,000	3,60,000	3,60,000
Land	10,17,581	10,27,652	10,27,742	10,99,380	11,04,150
Building	17,29,750	17,46,534	17,46,684	17,63,684	17,68,589
Plant & Machinery ..	31,21,377	31,61,151	31,68,865	32,38,462	32,41,275
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	1,19,736
Profits	3,63,935	4,00,996	9,04,548	5,12,119	*Nil.*
Dividend Per share ..	3	3	4/8	4/8	*Nil.*

The paid-up amount in 1920 and 1921 was Rs. 50 per share and in 1922 and 1923 it was Rs. 75 per share.

Diamond Spinning and Weaving Co., Ltd.—*contd.*

Mill : DeLisle Road. **Phone :** 40149.

Spindles : Ring, 34,552. **Looms,** 758. **Hands,** 1,550.

Yarn Spun : 10½s to 20½s. **Cloth :** Grey and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	19,91,480	Salaries and Wages at Mill and Office	5,44,825
Yarn (dyed)	75,777	Agents' Allowance and Remuneration	48,000
Stores	1,92,695	Interest	1,92,816
Coal	62,503		
Tata Hydro-Electric Energy	65,439		

Mill Staff. (*Copyright.*)

Manager	K. D. Postwalla.	Mechanical Engineer..	Bomanji H.Engineer.
Spinning Master ..	R. J. Screwalla.		
Weaving Master ..	K. D. Postwalla.		

Plant & Machinery.	Suppliers. (*Copyright.*)
Openers and Scutchers ...	Platt Bros. and Lord Brothers.
Cards	Howard & Bullough and Tweedales & Smalley.
Draw Frames	Howard & Bullough.
Roving Frames	Tweedales & Smalley.
Ring Frames	Howard & Bullough and Tweedales & Smalley.
Winding and Warping ...	Thomas Holt, Platt Bros. & Co. and Hacking & Co.
Sizing	Platt Bros. & Co. and Hacking & Co.
Looms	Do. Do.
Humidifiers	G. M. Parks.
Sprinklers	George Mills & Co. and Mather & Platt
Boilers	Tinker Shenton & Co.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

THE MILL INDUSTRY IN BOMBAY—1925. *[Photo Copyright.*

The Worli Group of Mills with the New Workmen's Quarters built by the Development Department (on the right). The Mills include the Globe Mills, the Standard, the Premier, the Pearl and other DeLisle Road Factories in the distance.

SIR CURRIMBHOY EBRAHIM, FIRST BARONET.
Born 1840. Died 1924.

"Happy as Sir Currimbhoy was in the thought of what he had done towards the development of the trades and industries of this great city and the well-being of thousands of its inhabitants, happier has he been in the thought of the loyalty and devotion of his sons who followed in the footsteps of a father's unceasing toil and co-operated with him in carrying out the noble aims of his life."—*Indian Textile Journal.*

CURRIMBHOY MILLS CO., LTD.

(INCLUDES MAHOMEDBHOY MILLS.)

CURRIMBHOY started in 1889. MAHOMEDBHOY started in 1899.

REGISTERED OFFICE :—12/14, OUTRAM ROAD, FORT, BOMBAY.

Telegrams : " MILLOFFICE, BOMBAY." Phone : 21297.

Directors :
Sir Sassoon David, Bart.
Cursetji Jamsetjee A. Wadia.
Sir Currimbhoy Ebrahim, Bart.
Sir Jamsetjee Jeejeebhoy, Bart.
F. E. Dinshaw.
Sir Fazulbhoy Currimbhoy, Kt.

Agents :
Currimbhoy Ebrahim & Sons, Ltd.

Auditors :
S. B. Billimoria & Co.
Rustomjee Modi and Damania.

Solicitors :
Payne & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 24,00,000 divided into 8,800 Ordinary Shares of Rs. 250 each. Issued, Rs. 22,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	22,00,000	22,00,000	22,00,000	22,00,000	22,00,000
Debenture	20,00,000	20,00,000	20,00,000	20,00,000	20,00,000
Debt Loans ..	†9,22,631	†8,65,327	†26,03,416	†28,01,731	†15,92,756
	‡9,06,474	‡6,82,945	‡4,96,344	‡3,38,907	‡4,39,812
Reserve Funds	14,82,168	23,24,530	27,21,646	28,25,238	25,82,474
Land	2,20,823	2,20,823	2,20,823	2,20,823	2,20,823
Building	14,28,893	13,75,011	13,52,773	13,41,062	12,92,542
Plant & Machinery ..	18,58,616	17,56,333	38,34,112	39,49,716	40,68,479
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	2,42,764
Profits	45,79,530	29,80,510	8,35,785	1,98,844	*Nil.*
Dividend Per Share ..	300	220	70	10	*Nil.*

† Loans. ‡ Liabilities.

Currimbhoy Mills Co., Ltd.—*contd.*

(Includes Mahomedbhoy Mills.)

Mill : DeLisle Road. **Phone :** 40872.

Spindles : Ring, 69,460 / Mule, 17,344 } 86,804. **Looms,** 1,050. **Hands,** 3,600.

Yarn Spun : 6s to 34s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1925.

	Rs.		Rs.
Cotton	62,61,953	Salaries and Wages at Mill .	11,70,272
Stores	2,02,026	Office Establishment ..	20,957
Coal	1,092	Agents' Remuneration ..	40,000
Liquid Fuel	1,57,160	Interest	2,50,217
Tata Hydro-Electric Energy	1,15,352		

Mill Staff. (*Copyright.*)

Manager ..	Walter Harrop.	Weaving Master	N. Duckworth.
Carding Master ..	W. Street.		
Spinning Master ..	Frank Bucknall.	Mechanical Engineer	W. Sutherland

Plant & Machinery.	Suppliers. (*Copyright.*)
Openers and Scutchers / Cards	Platt Bros. & Co., Howard & Bullough, & Lord Bros.
Drawing Frames	Do. Do.
Roving Frames	Asa Lees & Co., Platt Bros. & Co., Howard & Bullough, and Lord Bros.
Ring Frames	Platt Bros & Co., Howard & Bullough, & Asa Lees & Co.
Mules	Asa Lees & Co.
Winding and Warping / Sizing and Looms ..	Platt Brothers & Co., Ltd., Oldham.
Humidifiers	Mather & Platt, Ltd., & Ingersoll Rand (India), Ltd.
Sprinklers	George Mills & Co., Ltd., Radcliffe.
Steam Engine / Boilers	Hick, Hargreaves & Co., Ltd., Bolton.

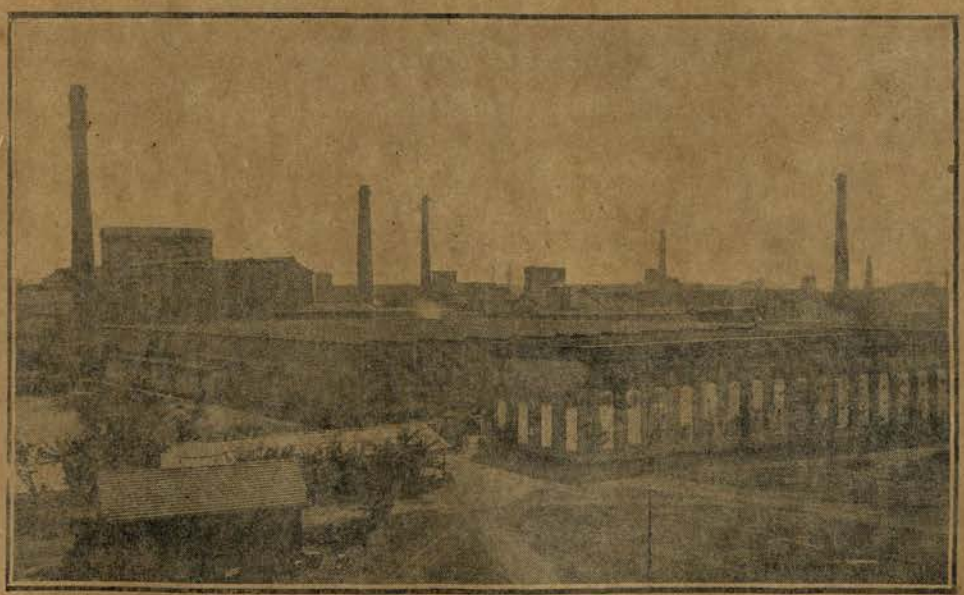
Mills driven by the Tata Hydro-Electric Power Supply, and also by Steam Engine.

SIR CURRIMBHOY EBRAHIM (SECOND BARONET).

Architects: Messrs. Gosting and Morris.

THE CURRIMBHOY AND MAHOMEDBHOY MILLS.

SIR FAZULBHOY CURRIMBHOY, KT., O.B.E.



THE FAZULBHOY MILLS.

FAZULBHOY MILLS, LTD

Started in 1905.

REGISTERED OFFICE :—12/14, OUTRAM ROAD, FORT, BOMBAY.

Telegrams : " MILLOFFICE, BOMBAY." Phone : 21297.

Directors :
Jamsetjee Ardeseer Wadia.
Sir Sassoon David, Bart., K.C.S.I.
Sir Currimbhoy Ebrahim, Bart.
Sir Jamsetjee Jeejeebhoy, Bart, K.C.S.I.
F. E. Dinshaw.
Cursetji J. A. Wadia.
Sir Fazulbhoy Currimbhoy, Kt., C.B.E.

Agents :
Currimbhoy Ebrahim & Sons, Ltd.

Solicitors :
Edgelow, Gulabchand, Wadia & Co.

Auditors :
A. F. Ferguson & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 20,00,000 divided into 8,000 Ordinary Shares of Rs. 250 each. Issued, Rs. 18,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital	18,00,000	18,00,000	18,00,000	18,00,000	18,00,000
Debenture	12,00,000	12,00,000	12,00,000	12,00,000	12,00,000
Debt Loans	18,30,115	8,60,220	9,67,023	9,77,913	8,43,572
Reserve Funds	24,00,351	25,23,758	32,57,293	36,01,080	36,01,080
Land	1,12,609	1,12,609	1,12,609	1,12,609	1,12,609
Buildings	8,90,697	8,50,697	8,10,697	7,82,740	7,67,013
Plant & Machinery ..	11,71,538	10,90,979	9,52,359	8,02,097	7,63,677
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	37,18,423	32,32,984	18,24,037	7,48,000	4,01,817
Dividend Per Share ...	420	260	150	80	45

Fazulbhoy Mills, Ltd.—*contd.*

Mill : DeLisle Road. **Phone :** 40957.

Spindles : Ring, 52,256. **Looms,** 1,976. **Hands,** 2,560.

Yarn Spun : 10s to 34s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1925.

	Rs.		Rs.
Cotton	53,90,360	Salaries and Wages at Mill .	11,17,669
Stores	4,93,887	Office Establishment ..	26,690
Coal	72,981	Agents' Remuneration ..	43,312
Electric Energy	1,73,602		

Due to Currimbhoy Ebrahim & Sons, Ltd., Rs. 45,218.

Mill Staff. (*Copyright.*)

Manager	M. D. Wadia.	Weaving Master ..	J. Mitton.
Carding and Spinning Master	J. Nolan.	Mechanical and Electrical Engineer	B. M. Colah.

Plant & Machinery. **Suppliers.** (*Copyright.*)

Openers and Scutchers, Cards .. .., Drawing Frames .., Roving Frames .., Ring Frames ..	Platt Bros. & Co., Ltd., Oldham.
Winding and Warping, Sizing .. .., Looms	Platt Bros. & Co. and William Dickinson & Sons.
Finishing	Mather & Platt, Ltd., Manchester.
Humidifiers	Mather & Platt, Ltd.
Boilers	Hick, Hargreaves & Co., Ltd., Bolton.
Electric Motors	British Westinghouse Electric & Manufacturing Co.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

EBRAHIMBHOY PABANEY MILLS CO., LTD.

Started in 1896.

REGISTERED OFFICE :—12/14, OUTRAM ROAD, FORT, BOMBAY.

Telegrams : " MILLOFFICE, BOMBAY." Phone : 21297.

Directors :

Sir Sassoon David, Bart.
Sir Currimbhoy Ebrahim, Bart.
Sir Jamsetjee Jeejeebhoy, Bart.
F. E. Dinshaw.
Sir Fazulbhoy Currimbhoy, Kt.
Cursetji Jamsetjee A. Wadia.

Agents :

Currimbhoy Ebrahim & Sons, Ltd.

Solicitors :

Payne and Co.

Auditors :

S. B. Billimoria & Co.
Rustomjee Mody and Damania.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 24,00,000 divided into 8,000 Ordinary Shares of Rs. 250 each. Issued, 8,000 Shares of Rs. 250 each = Rs. 20,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	20,00,000	20,00,000	20,00,000	20,00,000	20,00,000
Debenture	15,00,000	15,00,000	15,00,000	15,00,000	Paid off.
Debt Loans ..	†1,28,826	†1,01,500	†2,76,000	†14,37,483	†16,59,200
	‡8,09,035	†6,28,793	‡5,14,033	‡3,42,822	‡2,97,171
Reserve Funds	3,62,800	10,38,125	18,06,401	20,55,103	20,55,103
Land & Building ..	12,73,869	11,76,652	11,54,303	11,16,964	11,14,892
Plant & Machinery ..	26,69,304	23,58,170	24,24,873	22,43,969	21,73,451
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	28,96,754	27,99,685	12,52,879	2,14,264	2,43,917
Dividend Per Share ..	160	180	85	15	15

† Loans unsecured. ‡ Liabilities.

Ebrahimbhoy Pabaney Mills Co., Ltd.—*contd.*

Mill : DeLisle Road. **Phone :** 41021.

Spindles : Ring, 39,704 / Mule, 18,176 } 57,880. **Looms,** 1,054. **Hands,** 2,637.

Yarn Spun : 4s to 32s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1925.

	Rs.		Rs.
Cotton	51,91,468	Salaries and Wages at Mill .	10,64,707
Stores	2,94,148	Office Establishment ..	19,536
Fuel	49,660	Agents' Remuneration ..	36,000
Tata Hydro-Electric Supply	1,52,426	Interest	1,14,054

Mill Staff. (*Copyright.*)

Manager .. Abdulla Currimbhoy.	Weaving Master. .. F. H. Major.
Carding Master .. M. E. Bisni.	
Spinning Master .. H. D. Mody.	Mechanical Engineer .. D. P. Wadia.

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers ..	Platt Bros. and Lord Bros.
Cards	Tweedales & Smalley and Howard & Bullough.
Drawing Frames	Lord Bros. and Platt Bros.
Roving Frames	Tweedales & Smalley, Howard & Bullough and Lord Bros.
Ring Frames	Howard & Bullough, Tweedales & Smalley and Platt Bros.
Mules	Asa Lees & Co. and John Hetherington &Son.
Winding and Warping ..	Asa Lees and Platt Bros.
Sizing	Henry Livesey and Platt Bros.
Looms	Platt Bros. and Henry Livesey.
Humidifiers / Sprinklers	Mather & Platt Ltd., Manchester.
Steam Engine (for Dynamo)	Bellis, Morcum, Ltd., and Browett Lundly & Co.
Boilers	Hick, Hargreaves & Co., Ltd.
Electric Generators ..	Siemens Brothers Dynamo Works.
Electric Motors	The British Westinghouse Electric & Mfg. Co.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

PREMIER MILLS, LTD.

Started in 1921.

REGISTERED OFFICE :—12/14, OUTRAM ROAD, FORT, BOMBAY.

Telegrams : " MILLOFFICE, BOMBAY." Phone : 21297.

Directors :
Sir Sassoon David, Bart.
Sir Jamsetjee Jeejeebhoy, Bart.
Jamsetjee Ardaseer Wadia.
F. E. Dinshaw.
Sir Currimbhoy Ebrahim, Bart.
Sir Fazulbhoy Currimbhoy, Kt.
Cursetji J. A. Wadia.

Agents :
Currimbhoy Ebrahim & Sons, Ltd.

Solicitors :
Payne & Co.

Auditors :
A. F. Ferguson & Co.
S. B. Billimoria & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 20,00,000 divided into 20,000 Ordinary Shares of Rs. 100 each. Issued, 20,000 Shares of Rs. 100 each.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	19,97,810	19,97,840	19,97,880	19,97,880	19,97,880
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	†7,000	†14,09,029	†3,67,347	†21,83,738	†22,31,513
	‡9,67,547	‡14,36,642	‡25,20,333	‡5,84,766	‡9,20,797
Reserve Funds	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Land & Building ..	11,64,769	12,49,000	12,96,580	13,30,475	13,09,033
Plant & Machinery ..	12,95,343	24,89,555	31,59,755	31,82,972	32,64,350
Loss	18,034	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	*Nil.*	2,39,455	2,01,035	4,31,396	74,859
Dividend Per share ..	*Nil.*	*Nil.*	5	7	*Nil.*

† Loans. ‡ Liabilities.

Premier Mills Ltd.—*contd.*

Mill : Ferguson Road. **Phone :** 41556.

Spindles : Ring, 15,260. **Looms,** 472. **Hands,** 1302.

Yarn Spun : **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	5,94,818	Electric Energy	76,736
Waste	4,19,000	Salaries and Wages	5,21,213
Yarn	3,04,566	Office Establishment and Allowance	17,207
Stores	97,599	Agents' Remuneration	36,000
Dyeing charges	63,505	Interest	1,74,230
Coal	18,243		

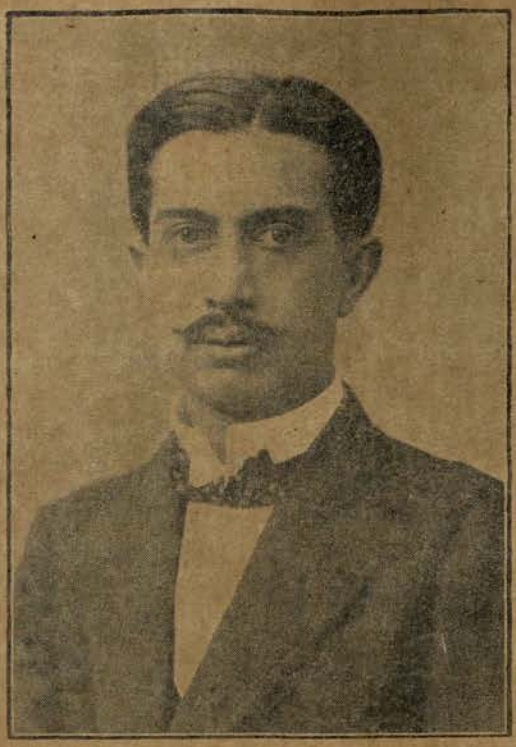
Due to Currimbhoy Ebrahim & Sons, Ltd., Rs. 4,69,185.

Mill Staff. *(Copyright.)*

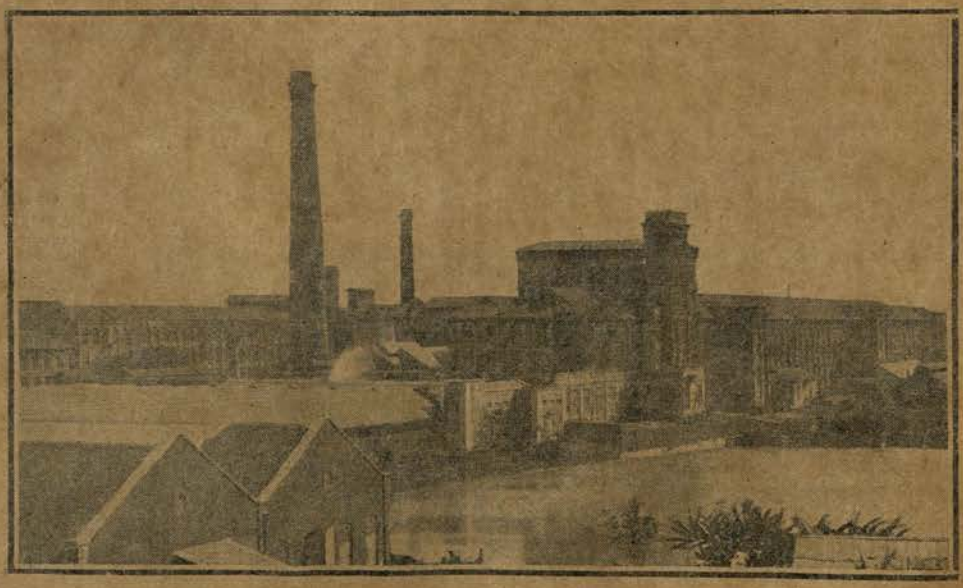
Manager	H. Nuttall.	Dyer	D. C. Mahadik.
Carding and Spinning Master	W. C. Dickinson	Mechanical and Elect. Engineer	W. Sutherland.
Weaving Master	H. Nuttall.		

Plant & Machinery.	Suppliers. *(Copyright.)*
Openers and Scutchers	Platt Bros. & Co., Ltd., Oldham.
Cards (German make)	Do. and Tweedales & Smalley.
Drawing Frames, Roving Frames	Platt Bros. & Co., Ltd., Oldham.
Ring Frames	Platt Bros. & Co., and Asa Lees & Co.
Winding and Warping, Sizing, Looms	Platt Bros. & Co.
Dyeing (Hydro-extractor)	Thomas Broadbent & Sons, Ltd., Huddersfield.
Humidifiers	Ingersoll Rand (India), Ltd.
Sprinklers	George Mills & Co., Ltd., Radcliffe.
Electric Generators, Electric Motors	Mather & Platt, Ltd., Manchester.

Mills driven electrically by the Andhra-Valley Electric Power Supply.



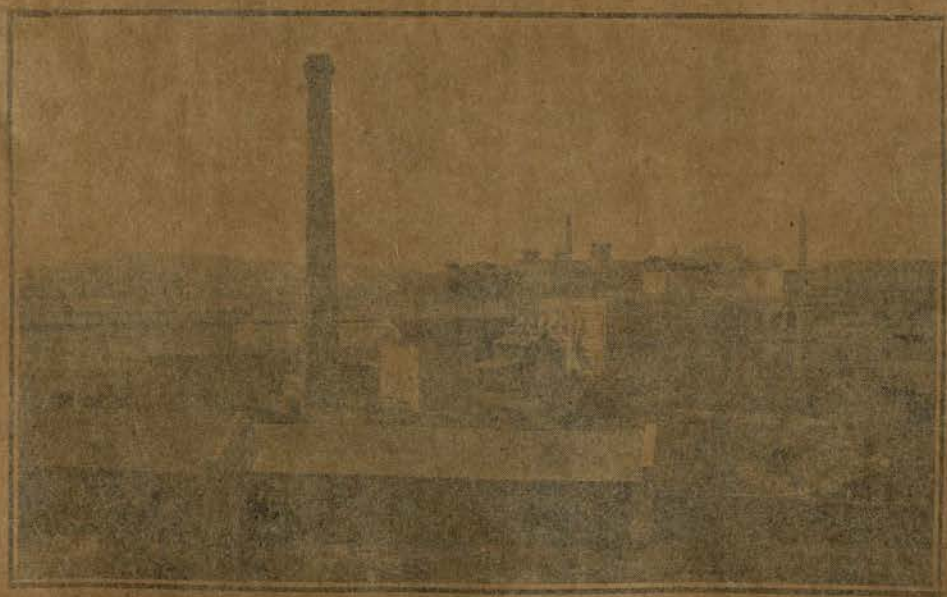
Mr. RAHIMTULLA CURRIMBHOY, M.L.A.
Born 1890. Died 1924.



Architects : Messrs. Gostling and Morris.

THE EBRAHIMBHOY PABANEY MILLS.

THE PEARL MILLS—ERECTED IN 1921.
(The only New Mill erected in Bombay since 1915.)



THE PREMIER MILLS.

PEARL MILLS, LTD.

Started in 1913.

REGISTERED OFFICE :—12/14, OUTRAM ROAD, FORT, BOMBAY.

Telegrams : " MILLOFFICE," BOMBAY. Phone : 21297.

Directors :
Sir Sassoon David, Bart.
Sir Jamsetjee Jeejeebhoy, Bart.
Jamsetjee Ardaseer Wadia.
F. E. Dinshaw.
Cursetjee J. A. Wadia.
Sir Currimbhoy Ebrahim, Bart.
Sir Fazulbhoy Currimbhoy, Kt.

Agents :
Currimbhoy Ebrahim & Sons, Ltd.

Solicitors :
Edgelow, Gulabchand Wadia & Co.

Auditors :
A. F. Ferguson & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 25,00,000 divided into 10,000 Ordinary Shares of Rs. 250 each. Issued Capital, Rs. 20,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	19,97,000	19,97,000	19,97,000	19,97,000	19,97,000
Debenture	15,00,000	15,00,000	15,00,000	15,00,000	*Nil.*
Debt Loans	†1,78,675	†4,46,000	†2,15,180	†57,000	†8,33,756
	‡7,44,035	‡11,67,386	‡5,33,655	‡3,29,339	‡4,50,151
Reserve Funds ..	10,89,198	15,30,592	22,55,003	25,59,922	25,59,922
Land & Building ..	12,42,075	12,02,275	11,72,075	11,46,337	11,63,923
Plant & Machinery ..	13,30,002	12,65,263	15,90,115	19,89,868	18,78,020
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	24,21,203	25,94,036	14,83,051	4,74,317	2,44,566
Dividend Per Share ..	180	180	110	40	22

† Loans. ‡ Liabilities.

Pearl Mills Ltd.—*contd.*

Mill : DeLisle Road. **Phone :** 40,446.

Spindles : Ring, 49,356. **Looms,** 1,760. **Hands,** 2,450.

Yarn Spun : 12s to 30s. **Cloth :** Grey, Bleached, and Coloured.

Principal Items of Expenditure for year ended 31st March, 1925.

	Rs.		Rs.
Cotton	45,36,503	Salaries and Wages at Mill .	9,70,748
Stores	2,47,418	Office Establishment and Allowance	25,378
Coal	33,923	Agents' Remuneration ..	36,000
Electric Energy	1,56,940	Interest	19,710

Mill Staff. *(Copyright.)*

Manager ..	Frank Stott.	Weaving Master ..	Frank Stott.
Carding and Spinning Master	W. Astley.	Mech. Engineer ..	R. E. Vatcha.
		Elect. Engineer ..	D. F. Mehta.

Plant & Machinery. Suppliers. *(Copyright.)*

Openers and Scutchers, Cards, Drawing Frames, Roving Frames, Ring Frames, Winding and Warping, Sizing, Looms	Platt Bros. & Co., Ltd., Oldham.
Finishing, Humidifiers, Sprinklers	Mather & Platt, Ltd., Manchester.
Electric Dynamo Engine	Beliss and Morcom.
Boilers	Hick, Hargreaves & Co., Ltd., Bolton.
Electric Lighting	Siemens Brothers.
Electric Motors	British Westinghouse Electric Co.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

CRESCENT MILLS CO., LTD.

Started in 1893 as DAMODAR. Converted into CRESCENT in 1905.

REGISTERED OFFICE :—12/14, OUTRAM ROAD, FORT, BOMBAY.

Telegrams : " MILLOFFICE," BOMBAY. Phone : 21297.

Directors :
Sir Sassoon David, Bart.
Jamsetjee Ardaseer Wadia.
Sir Jamsetjee Jeejeebhoy, Bart.
F. E. Dinshaw.
Cursetjee Jamsetjee A. Wadia.
Sir Fazulbhoy Currimbhoy, Kt., C.B.E.
Sir Currimbhoy Ebrahim, Bart.

Agents :
Currimbhoy Ebrahim & Sons, Ltd.

Solicitors :
Edgelow, Gulabchand, Wadia & Co.

Auditors :
A. F. Ferguson & Co.
S. B. Billimoria & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 15,00,000 divided into 15,000 Ordinary Shares of Rs. 100 each. Issued, Rs. 15,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	15,00,000	15,00,000	15,00,000	15,00,000	15,00,000
Debenture	12,00,000	12,00,000	12,00,000	12,00,000	*Nil.*
Debt Loans	†3,35,791 ‡7,73,481	†4,32,800 ‡8,61,887	†1,98,200 ‡5,48,545	†20,000 ‡2,65,111	†5,28,307 ‡3,51,223
Reserve Funds	17,39,002	22,65,281	27,06,569	28,67,489	27,47,489
Land & Building ..	7,14,587	7,03,632	6,88,605	6,58,605	6,36,605
Plant & Machinery ..	10,84,778	10,93,878	14,23,608	13,84,729	14,23,145
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	26,14,787	22,87,168	10,61,314	2,14,909	2,25,708
Dividend per Share ..	110	100	45	14	11

† Loans. ‡ Liabilities.

Crescent Mills Co., Ltd.—*contd.*

Mill : Fergusson Road. **Phone :** 40916.

pindles : Ring, 35,088 / Mule, 9,600 } 44,688. **Looms,** 1,054. **Hands,** 2,427.

Yarn Spun : 10s to 34s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1925.

	Rs.		Rs.
Cotton	39,05,534	Salaries and Wages at Mill.	9,31,310
Stores	2,35,481	Office Establishment ..	22,284
Coal	51,534	Agents' Remuneration ..	25,078
Hydro-Electric Energy ..	1,37,235		

Mill Staff : *(Copyright.)*

Manager ..	M. Kassum.	Weaving Master ..	A. Smith.
Carding Master ..	F. Boyd. / N. J. Batliwala.	Finisher ..	Bamanji Pestonji.
Spinning Master ..	F. Boyd. / S. S. Bharoocha.	Mech. Engineer ..	N. A. Kandawalla

Plant & Machinery. Suppliers. *(Copyright.)*

Openers and Scutchers ..	Platt Bros. & Co., Ltd., Oldham.
Cards	Platt Bros & Co., Ltd. and Howard & Bullough, Ltd.
Drawing Frames	Do.
Roving Frames	Do. Asa Lees & Co., Ltd.
Ring Frames	Do. Do. and Howard & Bullough.
Mules	Asa Lees & Co., Ltd., Oldham.
Winding and Warping ..	Platt Bros., Rudolph Bright, Joseph Stubbs and Willan & Mills.
Sizing	Platt Bros & Co., Ltd.
Looms	Do. and Wm. Dickinson & Sons.
Finishing .. / Humidifiers / Sprinklers ..	Mather & Platt, Ltd.
Steam Engine	John Musgrave & Sons, Ltd.
Boilers	Do. Hick Hargreaves & Co. and Galloways Ltd.
Electric Motors	British Westinghouse Electric & Mfg. Co., Ltd.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

KASTOORCHAND MILLS CO., LTD.

(INCLUDES IMPERIAL.)

KASTOORCHAND started in 1914. IMPERIAL started in 1882 and reconstructed in 1915.

REGISTERED OFFICE :—12/14, OUTRAM ROAD, FORT, BOMBAY.

Telegrams : " MILLOFFICE," BOMBAY. Phone : 21297.

Directors :
Sir Fazulbhoy Currimbhoy, Kt., C.B.E.
Ardaseer Jamsetjee Wadia.
Sir Currimbhoy Ebrahim, Bart.
Haji Gulam Mahomed Ajam.
F. E. Dinshaw.
Hon'ble Sir Pheroze Sethna, O.B.E.
Kikabhai Premchand.

Agents :
Currimbhoy Ebrahim & Sons, Ltd.

Auditors :
A. F. Ferguson & Co.

Solicitors :
Payne & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 48,00,000 divided into 9,600 Ordinary Shares of Rs. 500 each. Issued, Rs. 48,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	24,00,000	24,00,000	41,33,125	47,74,250	47,74,250
Debenture ..	*Nil.*	*Nil.*	*Nil.*	40,00,000	40,00,000
Debt Loans ..	†42,67,219	†73,10,930	†83,30,491	†69,36,097	†49,41,609
	‡8,66,050	‡9,83,862	‡14,20,705	‡24,94,986	‡57,70,414
Reserve Funds ..	1,80,000	12,00,000	14,87,150	14,87,150	14,87,150
Land & Building ..	14,22,838	24,01,588	35,45,303	45,23,345	48,93,053
Plant & Machinery ..	27,87,090	42,34,308	71,46,371	1,04,27,670	1,07,02,125
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	2,89,819
Profits	19,51,340	10,90,130	9,23,362	4,82,240	*Nil.*
Dividend Per share ..	275	125	68-8-0	*Nil.*	*Nil.*

† Unsecured Loans. ‡ Liabilities.

Kastoorchand Mills Co., Ltd.—*contd.*

(INCLUDES IMPERIAL.)

Mill : Dadar. **Phone :** 40564.

Spindles : 79,414. **Looms,** 913. **Hands,** 2,628.

Cloth : Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	41,76,429	Salaries and Wages at Mill .	13,46,105
Stores	6,17,913	Office Establishment and Allowance	43,982
Coal and Liquid Fuel ..	2,71,940	Agents' Remuneration ..	*Nil* (Loss).
Electric Energy	24,416	Interest	9,38,916

Due to Currimbhoy Ebrahim & Sons, Ltd., Rs. 53,52,811.

Mill Staff. (*Copyright.*)

Manager	E. A. G. Atkinson.	Finisher and Dyer ..	A. V. Yogi.
Carding and Spinning Master ..	E. Taylor.	Mech. Engineer ..	K. S. Iyer.
Weaving Master ..	J. B. Danson.	Elect. Engineer ..	J. M. N. Pillay.

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers, Cards .. .. Drawing Frames .. Roving Frames .. Ring Frames ..	Tweedale & Smalley, Ltd., Castleton.
Mules	Platt Bros. & Co., Ltd., Oldham.
Winding and Warping ..	Butterworth & Dickinson, and Thomas Holt.
Sizing	Do. and Howard & Bullough.
Looms	Do. and Robert Hall & Sons.
Humidifiers	Herbert Smethurst & Sons and Ingersoll Rand (India), Ltd.
Sprinklers	George Mills & Co., Ltd.
Electric Generators ..	Mather & Platt, Brown Boveri and Siemens Bros.
Electric Motors	Brown Boveri & Co., British Westinghouse Electric & Mfg. Co. and Siemens Bros.
Diesel Engine	Swiss Loco Diesel Engine.

Mills driven electrically by energy produced in the factory.

MATHRADAS MILLS, LTD.

Started in 1883 as the QUEEN MILLS. Became KING GEORGE MILLS in 1913. Reconstructed into MATHRADAS MILLS in 1917.

REGISTERED OFFICE :—12/14, OUTRAM ROAD, FORT, BOMBAY.

Telegrams : "MILLOFFICE," BOMBAY. Phone : 21297.

Directors :
Sir Fazulbhoy Currimbhoy, Kt.
Jamsetjee Ardaseer Wadia.
Sir Currimbhoy Ebrahim, Bart.
F. E. Dinshaw.
Haji Gulam Mahmoed Ajam.
Hon'ble Sir Phiroze Sethna, O.B.E.
Ardeseer Jamsetjee Wadia.

Agents :
Currimbhoy Ebrahim & Sons, Ltd.

Solicitors :
Payne & Co.

Auditors :
A. F. Ferguson & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 24,00,000 divided into 4,800 Ordinary Shares of Rs. 500 each. Issued, Rs. 24,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	21,00,000	23,99,875	24,00,000	24,00,000	24,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans ..	†34,49,574	†56,39,226	†45,78,452	†53,83,543	†55,20,141
	‡6,05,716	‡5,26,382	‡4,98,912	‡5,78,516	‡6,30,943
Reserve Funds	60,000	4,25,000	7,25,000	12,00,000	5,36,579
Land & Building ..	12,31,469	15,50,333	18,58,387	18,25,239	18,41,303
Plant & Machinery ..	17,38,840	22,55,197	27,21,995	28,38,724	28,52,942
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	11,30,146	10,61,236	12,94,607	1,10,579	*Nil.*
Dividend per Share ..	§200 ‖110	‖100	‖100	‖35	‖*Nil.*

† Unsecured Loans. ‡ Liabilities. § Old. ‖ New.

Mathradas Mills, Ltd.—*contd.*

Mill : DeLisle Road. **Phone :** 40851.

Spindles : Ring, 40,212 / Mule, 3,384 } 43,596. **Looms,** 907. **Hands,** 2,445.

Cloth : Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	37,75,560	Office Establishment and Allowance	39,902
Salaries and Wages at Mill.	8,21,991	Agents' Remuneration ..	*Nil.*
Coal and Liquid Fuel ..	93,094	Interest	3,69,533
Electric Energy	67,575		
Stores	2,41,499		

Due to Currimbhoy Ebrahim & Sons, Ltd., Rs. 1,87,565.

Mill Staff. (*Copyright.*)

Manager ..	S. L. Nanji.	Weaving Master ..	J. E. Boardman
Carding and Spinning Master	R. Ekersley.	Mechanical Engineer ..	G. E. Sagar.
		Electrical Engineer ..	J. M. Pilly.

Plant & Machinery.	**Suppliers.** (*Copyright.*)
Openers and Scutchers ..	Howard & Bullough, Tweedales & Smalley, Asa Lees & Co., and Taylor Lang.
Cards	Howard & Bullough and Tweedale & Smalley.
Drawing Frames	Do. Do. Asa Lees & Co.
Roving Frames .. / Ring Frames ..	.. Tweedale & Smalley and Howard & Bullough.
Mules	Asa Lees & Co. and Platt Bros & Co.
Winding and Warping ..	Thomas Holt.
Sizing	Platt Brothers, Howard & Bullough and Butterworth & Dickinson.
Looms	Platt Brothers, Henry Livesey, Butterworth & Dickinson and Gregson & Monk.
Sprinklers	George Mills & Co., Ltd., Radcliffe.
Boilers	Galloways, Ltd., Manchester.
Electric Motors	The British Westinghouse & Electric Mfg. Co., Ltd

Mill driven electrically by the Tata Hydro-Electric Power Supply.

MADHORAO SCINDHIA MILLS, LTD.

Started in 1889 as the SUN MILLS. Reconstructed as MADHORAO SCINDIA in 1917.

REGISTERED OFFICE :—12/14, OUTRAM ROAD, FORT, BOMBAY.

Telegrams : "MILLOFFICE," BOMBAY. Phone : 21297.

Directors :
Sir Sassoon David, Bart.
Jamsetjee Ardaseer Wadia.
Sir Currimbhoy Ebrahim Bart.
F. E. Dinshaw.
Hon'ble Sir Phiroze Sethna, O.B.E.
Ardeshir Jamsetji Wadia.
Sir Fazulbhoy Currimbhoy, Kt.

Agents :
Currimbhoy Ebrahim & Sons, Ltd.

Auditors :
A. F. Ferguson & Co.
S. B. Billimoria & Co.

Solicitors :
Payne & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 38,00,000 divided into 20,000 Preference Shares of Rs. 100 each and 18,000 Ordinary Shares of Rs. 100 each.

Issued, Rs. 38,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	23,00,000	38,00,000	38,00,000	38,00,000	38,00,000
Debenture	10,00,000	10,00,000	*Nil.*	*Nil.*	*Nil.*
Debt Loans ..	*16,38,369	*8,37,048	*11,07,133	*16,92,261	*31,39,184
	†3,04,986	†3,80,685	†4,02,314	†2,43,931	†6,34,055
Reserve Funds	50,000	1,25,000	4,25,000	6,75,000	25,092
Land & Building ..	8,07,714	8,07,714	10,40,482	12,10,476	14,32,943
Plant & Machinery ..	8,95,398	13,48,237	23,29,487	30,04,664	32,61,432
Loss	*Nil.*	*Nil.*	*Nil.*	2,07,881	4,42,026
Profits	8,18,793	15,93,571	14,00,673	*Nil.*	*Nil.*
Dividend Per share ..	‡20	‡50	‡40	*Nil.*	*Nil.*
Dividend Per cent. ..	§7	§7	§7	*Nil.*	*Nil.*

* Unsecured Loans. † Liabilities. ‡ Ordinary Shares. § Preference Shares.

Madhorao Scindhia Mills, Ltd. *-contd.*

Mill : Lower Parel. **Phone :** 40,910.

Spindles : 44,320. **Looms,** 604. **Hands,** 2,310.

Cloth : Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	32,85,665	Salaries and Wages at Mill.	7,15,111
Stores	2,58,575	Office Establishment and Allowance	35,394
Coal and Liquid Fuel ..	1,29,163	Agents' Remuneration ..	*Nil.*
Electric Energy	75,583	Interest	1,70,288

Due to Currimbhoy Ebrahim & Sons, Ltd., Rs. 3,37,849.

Mill Staff. *(Copyright.)*

Manager	C. Jafferbhoy.	Weaving Master ..	A. Johnson.
Carding Master ..	S. P. Bhawnagri.	Mech. Engineer ..	D. F. Bandravala.
Spinning Master ..	F. C. Driver.	Electrical Engineer .	D. F. Mehta.

Plant & Machinery.	Suppliers. *(Copyright.)*
Openers and Scutchers ..	Asa Lees & Co., Ltd.
Cards, Drawing Frames ..	Do. and Tweedales & Smalley, Ltd.
Roving Frames, Ring Frames	Tweedales & Smalley.
Mules	Asa Lees & Co., Ltd. and Platt Bros. & Co., Ltd.
Winding and Warping ..	Thomas Holt, Ltd., Rochdale.
Sizing, Looms	Butterworth & Dickinson, Ltd., Burnley.
Humidifiers	Herbert Smethurst & Sons, Ltd., Hollinwood.
Sprinklers	Hoffman Sprinkler Co., Ltd., Manchester.
Boilers	John Musgrave & Sons, Thomas Hill & Sons and Galloways Ltd.
Electric Motors	Mather & Platt, Ltd. and Brown Boveri & Co., Ltd.

Mill driven electrically by the Andhra Valley Power Supply.

BRADBURY MILLS, LTD.

Started in 1883 as RIPON MILLS and converted into BRADBURY in 1914.

REGISTERED OFFICE :—12/14, OUTRAM ROAD, FORT, BOMBAY.

Telegrams : " MILLOFFICE," BOMBAY. Phone : 21297.

Directors :
Sir Sassoon David, Bart., K.C.S.I.
Ardaseer Jamsetjee Wadia.
Sir Currimbhoy Ebrahim, Bart.
F. E. Dinshaw.
Hon. Sir Phiroze Sethna, O.B.E.
Byramjee Jeejeebhoy.
Jamsetji A. Wadia.
Jeejeebhoy R. B. Jeejeebhoy.
Sir Fazulbhoy Currimbhoy, Kt., C.B.E.

Agents :
Currimbhoy Ebrahim & Sons, Ltd.

Solicitors :
Payne & Co.

Auditors :
S. B. Billimoria & Co.
Ratansha Shapurjee Bharucha.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 25,00,000 divided into 6,000 Preference Shares of Rs. 250 each and 4,000 Ordinary Shares of Rs. 250 each.
Issued, Rs. 25,00,000.

	1920. Rs.	1921. Rs.	1922. Rs.	1923. Rs.	1924. Rs.
Paid-up Capital	16,00,000	24,85,000	24,85,000	24,85,000	24,85,000
Debenture	10,00,000	10,00,000	*Nil.*	*Nil.*	*Nil.*
Debt Loans ..	*15,73,239	*4,10,192	*7,83,185	*8,01,559	*15,56,567
	†4,65,550	†6,38,142	†4,57,279	†5,37,067	†2,25,187
Reserve Funds	1,00,000	1,00,000	6,50,000	14,00,000	14,00,000
Land & Building ..	5,82,173	5,80,069	5,91,696	6,66,717	6,52,195
Plant & Machinery ..	14,91,279	13,18,654	14,16,940	13,33,720	12,21,289
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	6,69,787	18,95,746	20,62,524	7,43,947	1,43,900
Dividend { Per share ..	‡55	‡200	‡200	‡105	10
Dividend { Per cent. ...	§7	§7	§7	§7	§7

* Unsecured Loans. † Liabilities. ‡ Ordinary Shares. § Preference Shares.

Bradbury Mills Ltd.—*contd.*

Mill : Ripon Road. **Phone :** 40841.

Spindles : Ring, 24,372 / Mule, 11,512 — 35,884. **Looms,** 662. **Hands,** 1,941.

Yarn Spun : 4s to 22s. **Cloth :** Grey, Bleached, and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	28,81,843	Salaries and Wages at Mill .	6,35,484
Stores	2,26,029	Office Establishment and Allowance	38,538
Coal	22,146	Agents' Remuneration ..	15,988
Electric Energy	74,416	Interest	24,643

Mill Staff. *(Copyright.)*

Manager	A. Moledina.	Weaving Master ..	J. A. Richard.
Carding and Spinning Master ..	W. Dowling.	Mechanical Engineer.	K. S. Patel.
		Electrical Engineer ..	J. M. N. Pillay.

Plant & Machinery. Suppliers. *(Copyright.)*

Openers and Scutchers ..	Tweedales & Smalley, Ltd.
Cards	Asa Lees & Co., Tweedales & Smalley, and Howard & Bullough, Ltd.
Drawing Frames	Lord Bros., Tweedales & Smalley, and Howard & Bullough, Ltd.
Roving Frames / Ring Frames	Tweedales & Smalley, and Howard & Bullough.
Mules	Asa Lees & Co., Ltd., Oldham.
Winding and Warping ..	Thomas Holt, Henry Livesey, Universal Winding Co. & Howard & Bullough, Ltd.
Sizing	Henry Livesey, Ltd., and George Keighley, Ltd.
Looms	Henry Livesey, Ltd., George Keighley, Ltd., Robert Hall & Sons, and Gregson & Monk, Ltd.
Bleaching / Finishing	Mather and Platt, Ltd., Manchester.
Humidifiers	Mather & Platt, Ltd., & Herbert Smethurst & Sons.
Sprinklers	Mather & Platt, Ltd., Manchester.
Boilers	Tinker Shenton & Co., Hyde.
Electric Motors	Mather & Platt, Ltd., Manchester.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

BIRLA MILLS, LTD.

Includes BIRLA MILLS 1 and 2. BIRLA No. 1 was started in 1896 as the DIAMOND MILL ; became REHMANI and RAMDAS and subsequently BIRLA 1 in 1917. BIRLA No. 2, was started as the INDO-CHINA in 1890 and converted into BIRLA No. 2 in 1919.

REGISTERED OFFICE :—CHURCHGATE STREET, FORT, BOMBAY.

Phone : Office—20076.

Directors :
F. H. Vakeel.
F. D. Allana.
R. B. Birla.
L. H. Daga.
H. M. Rahimtulla.
I. G. Allana.

Agents :
Allana Rahimtulla & Co.

Auditors :
Rustomji N. Mehta & Co.
Nagindas P. Mehta.

Solicitors :
Payne & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 61,25,000 divided into 61,250 Ordinary Shares of Rs. 100 each. Issued, Rs. 61,25,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	60,30,075	60,97,300	60,98,800	60,98,800	60,98,800
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	1,14,756	3,04,474	17,40,024	28,19,318	31,94,572
Reserve Fund	50,000	3,70,000	4,70,000	5,10,000	10,000
Land & Buildings No. 1	3,00,000	3,00,000	3,13,179	3,13,179	3,44,384
Land & Buildings No. 2	17,00,000	17,00,000	17,94,376	20,98,010	22,31,585
Plant and Machinery .. No. 1	9,01,767	9,18,506	9,60,951	9,39,179	9,65,914
Plant and Machinery .. No. 2	25,03,604	36,01,907	45,54,210	48,43,812	49,87,612
Loss	*Nil.*	*Nil.*	*Nil.*	2,13,184	4,25,513
Profits	22,47,773	14,86,598	6,93,556	*Nil.*	*Nil.*
Dividend per Share ..	27	15	6/8	*Nil.*	*Nil.*

Birla Mills, Ltd.—*contd.*

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	24,08,406	Salaries and Wages, Mill and Office	6,06,690
Stores	1,53,643	Agents' Commission ..	17,000
Coal	1,18,234	Interest	1,97,489

Mill No. 1 : Elphinstone Road. **Phone :** 41032.

Spindles, 19,086. **Looms,** *Nil.* **Hands,** 600.

Mill Staff. (*Copyright.*)

Manager .. } .. N. A. Cama.
Carder and Spinner }

Mechanical Engineer .. Navroji Fakirji

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers	Lord Bros.
Cards	Asa Lees & Co., Howard & Bullough and John Hetherington & Sons.
Draw and Roving Frames	Asa Lees & Co. and Howard & Bullough.
Mules	Asa Lees & Co.
Humidifiers	Hoffmann Sprinkler Co., Ltd.
Sprinklers	Mather & Platt, Ltd.
Steam Engine and Boilers	John Musgrave & Sons.

Mill No. 2 : Sewree. **Phone :** 40831.

Spindles, 25,592. **Looms,** 400. **Hands,** 900.

Mill Staff. (*Copyright.*)

Manager .. } .. B. B. Wadia.
Carder and Spinner }

Weaving Master, Bleacher, Finisher and Dyer .. N. N. Aria.
Mechanical Engineer .. Palonji Sorabji Bharucha.

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers	Platt Bros. and Lord Bros.
Cards and Roving Frames	Platt Bros., Tweedales & Smalley and Howard & Bullough.
Draw Frames	Platt Bros. and Tweedales & Smalley.
Ring Frames	Tweedales & Smalley and Howard & Bullough.
Mules	Platt Bros.
Winding, Warping, Sizing and Looms.	Wm. Dickinson & Sons.
Finishing	Mather & Platt.
Humidifiers	Andrew Patent through Felber, Jucker & Co.
Sprinklers	Witter & Sons and Mather & Platt.
Steam Engine and Boilers ..	Hick, Hargreaves & Co., Ltd.

JIVRAJ BALOO SPG. & WVG. CO., LTD.

Started in 1872.

REGISTERED OFFICE :—SLEATER ROAD, BOMBAY.

Telegrams : "SECURITY," BOMBAY. Phone : 40930.

Directors.:
Naranji Dwarkadas.
Karsondas Thackersey Rowjee.
Sir Hormusji Cowasji Dinshaw Adenwala, Kt.
Hooseinbhoy A Laljee.
Abdul-Razak Nassurbhoy A. Lalljee.
Ibrahimbhoy F. J. Laljee.
Jafferbhoy A. Lalljee.

Agents :
Abdoolabhoy Joomabhoy Lalljee & Co.

Auditors :
J. K. Parulkar.

Solicitors :
Craigie, Blunt & Caroe.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 13,00,000 divided into 1,100 Ordinary Shares of Rs. 1,000 each and 800 Ordinary Shares of Rs. 250 each.

Issued Capital, Rs. 11,00,000 divided into 900 Whole Shares of Rs. 1,000 each=Rs. 9,00,000 ; 800 Quarter Shares of Rs. 250 each=Rs. 2,00,0000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	11,00,000	11,00,000	11,00,000	11,00,000	11,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve Funds	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Land & Building ..	9,23,129	9,53,978	9,53,978	9,53,978	9,60,579
Plant & Machinery ..	19,97,681	21,57,208	21,64,443	21,78,063	21,78,063
Loss	*Nil.*	*Nil.*	*Nil.*	77,697	6,27,505
Profits	3,01,094	3,16,135	3,79,610	*Nil.*	*Nil.*
Dividend per Share ..	140	120	120	*Nil.*	*Nil.*

Jivraj Baloo Spg. & Wvg. Co., Ltd.—*contd.*

Mill : Tardeo. **Phone :** 40930.

Spindles : Ring, 20,316. Mule, 13,200. } 33,516. **Looms,** 663. **Hands,** 1,800.

Yarn Spun : **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton	.. 20,03,991	Salaries and Wages at Mill and Office	6,11,568
Stores		Agents' Remuneration ...	41,648
Coal and Liquid Fuel		Interest	1,61,487

Loan due to Abdullabhoy and Joomabhoy Laljee, Rs. 28,79,985.
Cash due to Abdullabhoy Joomabhoy Laljee & Co., Rs. 2,08,753.

Mill Staff. (*Copyright.*)

Manager	A. C. Homji.	Dyer	S. G. Vaidya.
Carding and Spinning Master	S. T. Pathak.		
Weaving Master	F. A. Hayvoy.	Mechanical Engineer..	A. C. Homji.

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers ..	Platt Bros. and Taylor Lang.
Cards	Tweedale & Smalley, Elijah Ashworth, Howard & Bullough, and Platt Bros.
Drawing Frames, Roving Frames ..	Platt Bros. and Tweedale & Smalley.
Ring Frames	Tweedale & Smalley, Howard & Bullough and Asa Lees.
Mules	Asa Lees & Co. and Taylor, Lang & Co.
Winding and Warping ..	John Dugdale, Henry Livesey, Thomas Holt, Hacking & Co. and Wm. Dickinson.
Sizing	John Dugdale and Hacking & Co.
Looms	Robert Hall, Henry Livesey and Hacking & Co.
Finishing	John Downham & Co.
Dyeing	Thos. Broadbent & Sons, Baldwin & Heap., C. G. Haubold and Albert Kiesler (Zittan).
Humidifiers	Ardeshir Wadia & Co.
Sprinklers ..	Mather & Platt.
Steam Engine	John Musgrave & Sons, Ltd.
Boilers	Hick, Hargreaves & Co.
Electric Generators ..	Siemens Bros.

DAWN MILLS COMPANY, LTD.

Started in 1883 as LUKHMIDAS. Converted into DAWN in 1910.

REGISTERED OFFICE :—143, ESPLANADE ROAD, FORT, BOMBAY.

Telegrams : " PSALMIST," BOMBAY. Phone : 20730.

Directors :

Sir Sassoon David, Bart., K.C.S.I.
J. E. Ezra.
F. E. Dinshaw.
Ramnarain Harnandrai.

Secretary :

H. F. Major.

Agents :

Sassoon J. David & Co., Ltd.

Auditors :

S. B. Billimoria & Co.
Ratanshaw Shapurji Bharucha.

Solicitors :

Wadia Ghandhy & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 8,00,000 divided into 3,200 Ordinary Shares of Rs. 250 each. Issued, Rs. 8,00,000 paid up fully.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ...	8,00,000	8,00,000	8,00,000	8,00,000	8,00,000
Debenture	8,00,000	8,00,000	8,00,000	8,00,000	*Nil.*
Debt Loans	5,04,455	8,95,255	4,15,093	5,96,534	2,91,027
Reserve Funds	7,20,000	19,20,000	25,00,000	28,00,000	29,00,000
Building ..	4,96,680	4,97,467	4,66,016	4,55,126	4,47,749
Land	3,92,371	3,92,371	3,46,154	3,46,154	3,46,154
Assets (other)	36,29,377	41,21,159	36,72,495	34,68,401	22,73,961
Plant & Machinery ...	9,27,344	10,14,173	10,32,791	11,24,085	12,16,196
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	27,01,514	14,18,628	11,18,708	3,57,335	1,84,419
Dividend per Share ...	350	300	180	60	40

Dawn Mills Company, Ltd.—*contd.*

Mill : Fergusson Road, Parel. **Phone :** 40856.

Spindles : Ring, 28,968 / Mule, 10,848 } 39,816. **Looms,** *Nil.* **Hands,** 1,753.

Yarn Spun : 3*s* to 40*s*. Also Double Yarn.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	49,59,689	Salaries and Wages at Mill and Office	5,11,011
Stores	1,14,983		
Coal	9,148		
Tata Hydro-Electric Drive .	73,680	Agents' Remuneration ..	21,824

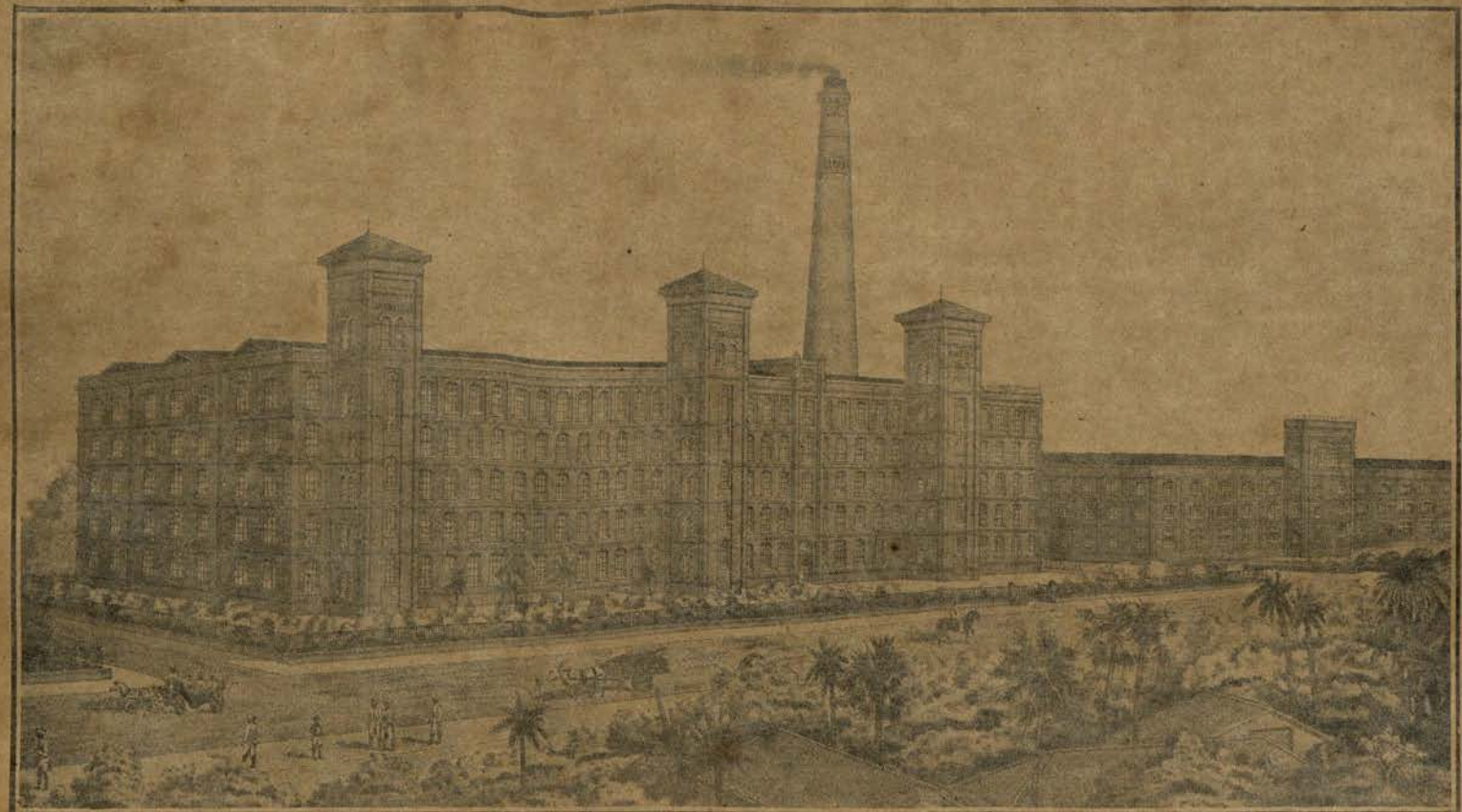
Mill Staff. (*Copyright.*)

Manager, Carding Master, Spinning Master	H. Hargreaves.	Mechanical and Electrical Engineer	H. F. Bamji.

Plant & Machinery. **Suppliers.** (*Copyright.*)

Openers and Scutchers ..	Lord Bros. and Asa Lees & Co.
Cards .. .. / Drawing Frames ..	Lord Bros. and Tweedales & Smalley.
Roving Frames .. / Ring Frames ..	Howard & Bullough and Tweedales & Smalley.
Mules	Asa Lees & Co., Ltd., Oldham.
Winding / Doubing	Arundel Coulthard & Co. and Tweedales & Smalley.
Bleaching	(Local make.)
Humidifiers	Mather & Platt, Ltd., Manchester.
Sprinklers	Witter & Son.
Boilers	George Inglish & Co.
Electric Motors	British Westinghouse Electric & Mfg. Co., Ltd.

Mills driven electrically by the Tata Hydro-Electric Power Supply.



THE JACOB SASSOON MILLS.

The largest Spinning and Weaving Mills in India.

[Architects: Messrs. Gostling and Moore.

E. D. SASSOON UNITED MILLS, LTD.

Registered in 1920.

(Including the Alexandra, E. D. Sassoon, Jacob Sassoon, Rachel Sassoon, Manchester Mills and E. D. Sassoon Turkey Red Dye Works.)

REGISTERED OFFICE :—DOUGALL ROAD, BALLARD ESTATE, BOMBAY.

Telegrams : " SPINDLES," BOMBAY. Phone : 26511.

Directors :

Sir Victor Sassoon, Bart.
Sir Fazulbhoy Currimbhoy, Kt.
A. J. Raymond.
S. R. Bomanji.
Narottam Morarji.
F. E. Dinshaw.
Albert Raymond.

Agents :
E. D. Sassoon & Co., Ltd.
Secretary :
C. C. G. Uwins.
Auditors :
S. B. Billimoria & Co.
A. F. Ferguson & Co.
Solicitors :
Payne & Co.
Bankers :
E. D. Sassoon & Co., Ltd.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 10,00,00,000 divided into 2,000,000 7½ per cent. Cumulative Shares of Rs. 10 each and 8,000,000 Ordinary Shares of Rs. 10 each.

Issued, Rs. 6,00,00,000 { 2,000,000 Cum. Pref. Shares of Rs. 10 each; 4,000,000 Ordinary Shares of Rs. 10 each.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital	4,95,37,853	4,99,80,193	5,00,00,000	6,00,00,000	6,00,00,000
Debt Loans ..	2,25,42,974	2,82,19,632	2,10,17,785	2,73,49,715	2,12,72,767
Reserve Funds .	95,077	1,12,420	61,11,672	85,543	93,436
Land & Building	1,66,07,027	1,67,04,643	1,65,74,224	1,67,95,370	1,66,69,271
Plant & Machinery	2,81,90,556	2,68,86,595	2,67,37,449	2,82,93,917	2,89,23,529
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	9,47,813
Profits	91,76,658	95,89,177†	56,75,031†	14,58,939	*Nil.*
Dividend Per Share ..	0-8-0	*Nil.*	*Nil.*	*Nil.*	*Nil.*

† Out of the profits earned during 1921 and 1922 the sum of Rs. 2-8-0 per share was capitalised and no further calls are thus now payable, the Rs. 7-8-0 paid-up shares being treated as fully paid shares of Rs. 10 each.

E. D. Sassoon United Mills, Ltd.—*contd.*

Principal Items of Expenditure, etc., for year ended 31st December, 1924.

	Rs.		Rs.
Cotton .. Yarn .. Dyes .. Chemicals Stores ..	 2,57,05,731	Salaries and Wages at Mill and Office	44,12,603
Coal, Liquid Fuel and Electric Energy ..	13,65,459	Agents' minimum Remuneration .. .. .. (Waived voluntarily).	1,20,000
		Interest	13,43,278

Due to E. D. Sassoon & Co., Ltd., Rs. 1,83,70,237.

The Alexandra Mill.

Started in 1868 ; reconstructed in 1872 and converted into the present Alexandra in 1880.

Mill : Chinchpoogly. **Phone :** Office 26511. Mill Extension 41.

Spindles : Ring, 37,120. **Looms,** 800. **Hands,** 2,546.

Yarn Spun : 2*s* to 40*s* and Cotton Waste. **Cloth :** Grey, Bleached and Coloured.

Mill Staff. (*Copyright.*)

Manager ..	T. Spencer.	Weaving Master ..	E. P. Patel.
Asstt. Manager ..	A. H. Raymond.	Dyer	I. P. Daphtary.
Carding and Spinning Master ..	J. E. Watts.	Mech. Engineer ..	Dadabhoy Nowroji.
		Elect. Engineer ..	H. D. Kharas.

Plant & Machinery. **Suppliers.** (*Copyright.*)

Openers and Scutchers ..	Lord Brothers, Todmorden.
Cards	Platt Brothers, and Howard & Bullough.
Drawing Frames .. Roving Frames ..	Platt Brothers, Howard & Bullough, and Lord Brothers.
Ring Frames	Howard & Bullough, Thos Holt and Brooks & Doxey.
Winding	Henry Livesey and Howard & Bullough.
Warping	Do. Do.
Sizing	Do. Do. & Wm. Dickinson.
Looms	Howard & Bullough and Butterworth & Dickinson.
Finishing	Henry Livesey, George Keighley & Northrope.
Dyeing	J. H. Riley & Co., and Lang Bridge.
Humidifiers	Franklin Process Co., Boston, U.S.A.
Sprinklers	Mather & Platt, Ltd., Manchester.
Electric Generators .. Electric Motors	British Westinghouse Electric & Manufacturing Co., and Swedish General Electric Co.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

E. D. Sassoon United Mills, Ltd.—*contd.*

Jacob Sassoon Mill.

Started in 1893.

Mill : Supari Baug, Parel. **Phone :** Office 26511 ; Mill Extension 42.

Spindles : Ring, 90,320 ; Mule, 10,512 } 100,832. **Looms,** 2,221. **Hands,** 5,410.

Yarn Spun : 2*s* to 40*s* and Cotton Waste. **Cloth :** Grey, Bleached and Coloured.

Mill Staff. (*Copyright.*)

Manager	W. Ridyard.	Weaving Master	J. Hinchliffe.
Asstt. Manager	A. Jacob.	Dyer	B. J. Oka.
Carding Master	B. Atmaram.	Mechanical and Electrical Engineer	D. B. Kulkarni.
Spinning Master	J. Brooks.	Assistant Electrical Engineer	M. M. Beg.

Plant & Machinery. **Suppliers.** (*Copyright.*)

Openers and Scutchers	Platt Bros. and Taylor Lang.
Cards	Platt Bros., Tweedale & Smalley, Asa Lees and William Tatham.
Drawing Frames	Platt Bros. & Co., Ltd., Oldham.
Roving Frames	Platt Bros. and William Tatham.
Ring Frames	Brooks & Doxey, Platt Bros. and Howard & Bullough.
Mules	Platt Bros. and Taylor Lang & Co.
Winding and Warping, Sizing, Looms	Henry Livesey, Ltd.
Finishing	J. H. Riley & Co., Ltd.
Dyeing	Franklin Proces Co.
Humidifiers	Textile Engineering and Illuminating Co.
Sprinklers	Mather & Platt.
Steam Engine	Hick, Hargreaves, 3,000 H. P. (Not working.)
Boilers	Thomas Beeley & Sons, Hyde.
Electric Transformers	British Electric Transformer Co.
Electric Motors	Swedish General Electric Co.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

E. D. Sassoon United Mills, Ltd.—*contd.*

E. D. Sassoon Mill.

Started in 1883.

Mill : Chinchpoogly. **Phone:** Office 26511 ; Mill Extension 41.

Spindles : Ring, 79,268 ; Mule, 10,758 } 90,026. **Looms,** 841. **Hands,** 2,349.

Yarn Spun : 2s to 40s and Cotton Waste. **Cloth :** Grey Bleached and Coloured.

Mill Staff. (*Copyright.*)

Manager	T. Spencer.	Weaving Master	E. P. Patel.
Asstt. Manager	A. H. Raymond.	Mech. Engineer	Dadabhoy Nowroji.
Carding and	H. Turner.	Elect. Engineer	H. D. Kharas.
Spinning Masters	W. Gregory.		

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers	Platt Bros., Taylor Lang, Howard & Bullough and Lord Bros.
Cards	Platt Bros., and Howard & Bullough.
Drawing Frames	Platt Bros., and Howard & Bullough.
Roving Frames	Do. Do. Lord Bros.
Ring Frames	Platt Bros., Lord Bros., Brooks & Doxey.
Mules	Platt Brothers & Co., Ltd., Oldham.
Winding and Warping	*Nil.*
Sizing	*Nil.*
Looms	Henry Livesey.
Finishing	Lang Bridge, Ltd., Accrington.
Dyeing	*Nil.*
Humidifiers	Mather & Platt, Ltd.
Sprinklers	Mather & Platt, Ltd.
Steam Engine*	Hick, Hargreaves & Co., Ltd.
Boilers	Yates and Thom.
Electric Generators	British Westinghouse Electrical and Motor Co. and Swedish General Electric Co.
Electric Motors	British Westinghouse Electrical and Motor Co. and Swedish General Electric Co.
Diesel Engine*	Sulzer Bros. and Carrol.

*Not working.

E. D. Sassoon United Mills, Ltd.—*contd.*

Rachel Sassoon Mill.

Started as PEOPLE OF INDIA in 1882 and reconstructed and converted into RACHEL SASSOON in 1895.

Mill : Chinchpoogly. **Phone :** Office 26511 ; Mill Extension 40.

Spindles : *Nil.* **Looms,** 2,020. **Hands.** 2,049.

Cloth : Grey, Bleached and Coloured.

Mill Staff. (*Copyright.*)

Manager ..	H. Heys.	Finisher.. ..	E. McPhail.
Asstt. Manager	D. S. Cohen.	Mechanical and Electrical Engineer	N. G. Pethe.
Weaving Master	W. H. Uttley.		

Plant & Machinery. **Suppliers.** (*Copyright.*)

Winding and Warping	Henry Livesey, Butterworth & Dickinson, Thomas Holt and Schwieter Ltd.
Sizing	Do. Do.
Looms	Henry Livesey, Ltd.
Finishing	J. H. Riley & Co. and Mather & Platt.
Humidifiers (" Vortex ") Sprinklers	Mather & Platt, Ltd., Manchester.
Boilers	Hick, Hargreaves & Co., Ltd., Bolton.
Electric Motors	Swedish General Electric Co.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

E.D. Sassoon United Mills, Ltd.—*contd.*

E. D. Sassoon Turkey Red Dye Works.

Works : Cadell Road, Dadar. **Phone :** Office 26511, Mill Extension 45.

Spindles : Ring, 1,360. **Hands,** 515.

Waste Yarn Spun : 2*s* to 8*s*. **Cloth :** Grey, Bleached and Coloured.

Mill Staff. (*Copyright.*)

Manager	.. G. S. Williams.	Dyer	.. K. P. Dhuru.
Carding and Spinning Master	.. B. J. Thakur.	Mechanical and Elect. Engineer	.. E. H. Elchidana.
Finisher	.. W. L. Naik.		

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers ..	Platt Bros. and G. Josephys Erben.
Cards	G. Josephys Erben and William Tatham.
Ring Frames	G. Josephys Erben.
Bleaching	Sir James Farmer and F. R. Gebauer.
Finishing	J. H. Riley & Co., Ltd.
Dyeing	D. Stewart & Co.
Sprinklers	Mather & Platt, Ltd.
Boilers	Hick, Hargreaves & Co.
Electric Motors	Swedish General Electric Co.

E. D. Sassoon United Mills, Ltd.—*contd.*

The Manchester Mill.

Started as PRINCE OF WALES in 1874; reconstructed into HONGKONG in 1890 and into MANCHESTER in 1925.

Mill : Chinchpoogly. **Phone :** 40836.

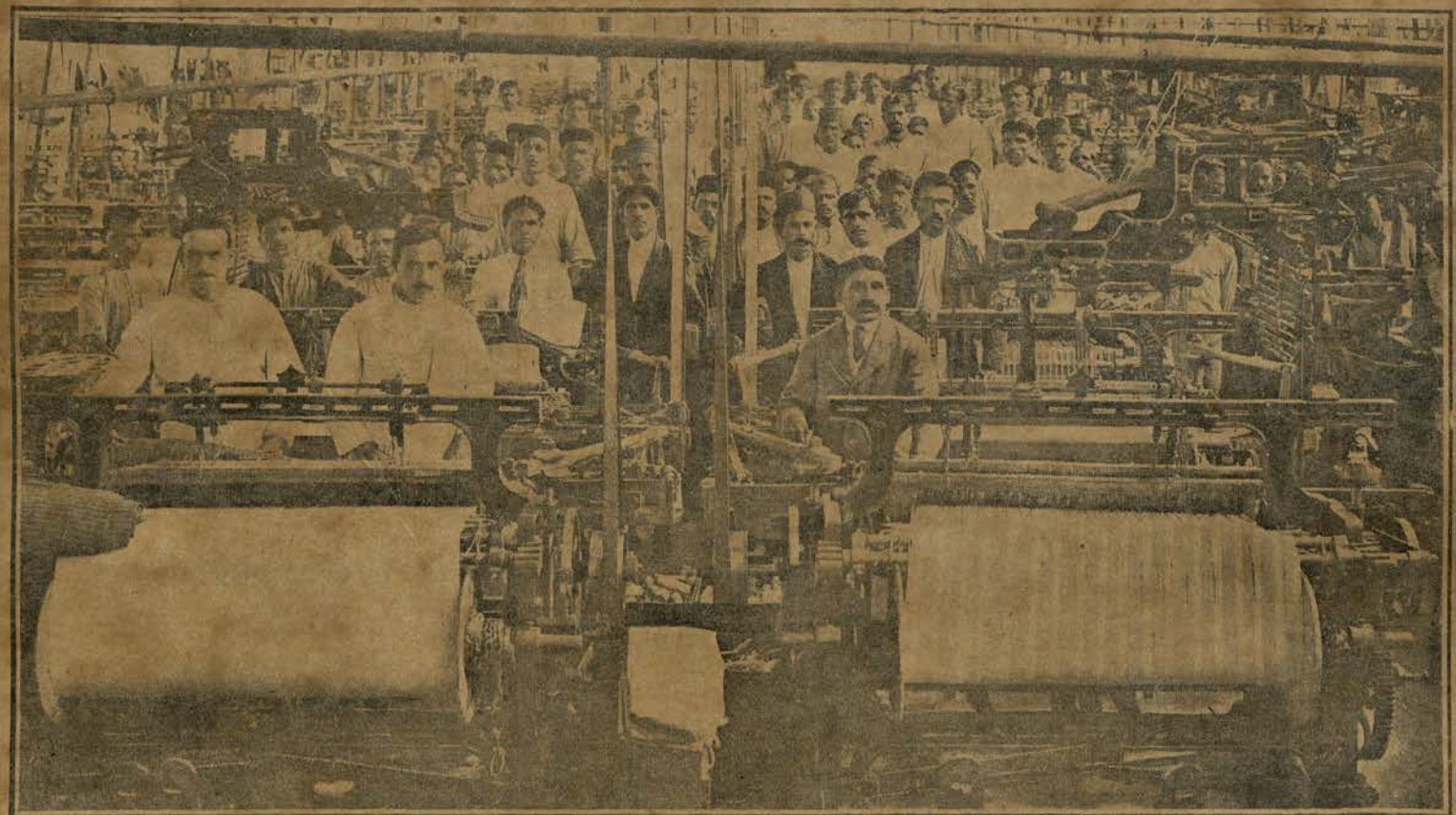
Spindles : Ring, 21,060 / Mule, 4,384 } 25,444. **Looms,** 850. **Hands,** 1610.

Yarn Spun : 2s to 40s also Cotton Waste. **Cloth :** Grey, Bleached and Coloured.

Mill Staff. (*Copyright.*)

Manager ..	R. J. Master.	Spinning Master ..	R. J. Master.
Asstt. Manager ..	Joseph Raymond.	Weaving Master ..	Jacob Mordecai.
Carding Master ..	B. M. Borker.	Engineer ..	K. A. Minocher Homji.

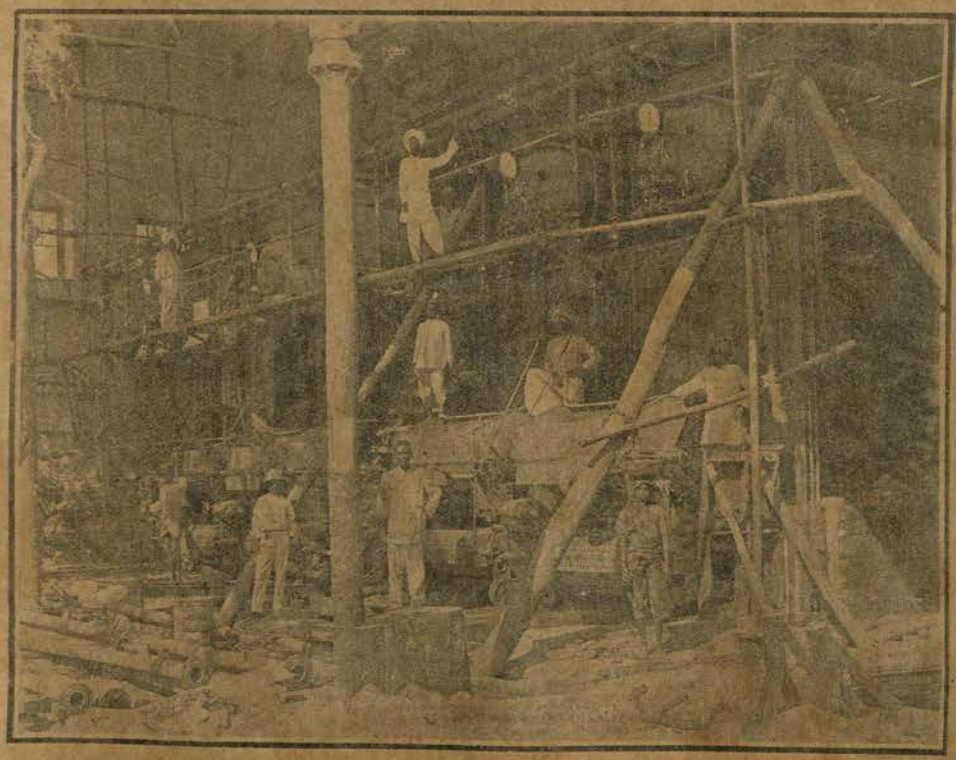
Plant & Machinery.	Suppliers. (*Copyright.*)
Openers & Scutchers. ..	Tweedales & Smalley, Lord Bros. and Dobson & Barlow.
Cards	Do. and Howard & Bullough.
Drawing	Asa Lees and Tweedales & Smalley.
Slubbing, Inter & Roving	Tweedales & Smalley.
Ring	Brooks & Doxeys and Tweedales & Smalley.
Mule	Asa Lees & Co., Ltd.
Winding / Warping	Howard & Bullough, Henry Livesey and Butterworth & Dickinson.
Sizing	Howard & Bullough and Butterworth & Dickinson.
Looms	Henry Livesey, Butterworth & Dickinson and John Dugdale.
Finishing & Calendering.	J. H. Riley and Mather & Platt.
Humidifiers .. / Sprinklers	Mather & Platt, Ld.
Boilers	Thomas Beeley & Sons.
Electric Generators ..	Mather & Platt Ld.
Steam Engine	John & E. Wood (now merged into John Musgraves & Sons, Ltd., Bolton).



A MODERN WEAVING SHED : THE MEYER SASSOON MILLS.

Front Row Left to Right—Mr. A. J. Hallegua, Mr. J. M. Narielwalla and Mr. W. R. Chawan. Behind Mr. Narielwall (right) is Mr. N. B. Naray next to whom is Mr. Daji Shivram. Behind Mr. Chawan (left) is Mr. Rajaram Abaji.

THE MEYER SASSOON MILLS: THE WELL-LIGHTED SIZING DEPARTMENT.



ERECTING THE BABCOX & WILCOX BOILERS.

EDWARD SASSOON MILLS, LTD.

Started as TRICUMDAS in 1898. Converted into EDWARD SASSOON in 1910.

REGISTERED OFFICE :—DOUGALL ROAD, BALLARD ESTATE, BOMBAY.

Telegrams : " SPINDLES," BOMBAY. Phone : 26511.

Directors :

Sir Victor Sassoon, Bart.
A. J. Raymond.
Rao Saheb Khimji Cooverji.
S. R. Bomanji.
H. M. Mehta.
F. E. Dinshaw.
N. P. Whaddia.
Albert Raymond.

Agents :

E. D. Sassoon & Co., Ltd.

Secretary :

C. C. G. Uwins.

Solicitors :

Payne & Co.

Auditors :

A. F. Ferguson & Co.
S. B. Billimoria & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 17,00,000 divided into 8,500 Ordinary Shares of Rs. 200 each. Issued, Rs. 17,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	17,00,000	17,00,000	17,00,000	17,00,000	17,00,000
Debenture	12,00,000	12,00,000	12,00,000	12,00,000	12,00,000
Debt Loans	12,38,987	18,98,523	37,29,990	51,25,326	21,20,019
Reserve Funds	4,05,000	11,05,000	13,16,115	15,06,745	15,09,996
Land & Building ..	9,70,947	9,80,550	9,94,403	10,08,068	9,92,823
Plant & Machinery ..	14,99,672	20,58,179	24,16,994	23,53,483	26,06,614
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	1,47,268
Profits	21,47,730	14,42,849	9,26,797	1,86,298	*Nil.*
Dividend per Share ..	100	100	60	10	*Nil.*

Edward Sassoon Mills, Ltd.—*contd.*

Mill : Ferguson Road. **Phone :** Office : 26511, Mill Extension 43.

Spindles : Ring, 16,152 / Mule, 29,256 } 45,408. **Looms,** 868. **Hands,** 2,273.

Yarn Spun : 2*s* to 40*s* and Cotton Waste. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton .. .. / Stores .. .. / Coal .. .. / Liquid Fuel .. / Electric Energy, etc.	.. 40,28,779	Salaries and Wages at Mill and Office	8,11,312
		Agents' Remuneration .. (Waived voluntarily.)	36,000
		Interest	2,11,918

Due to E. D. Sassoon & Co., Ltd., Rs. 11,26,885.

Mill Staff. (*Copyright.*)

Manager	.. Thomas Holden.	Weaving Master	.. H. Sharpe.
Asstt. Manager	.. I. B. Gemal.	Mechanical and Electrical Engineer	K.A. Muzumdar.
Carding Master	.. G. R. Pradhan.		
Spinning Master	.. N. Baboorao.		

Plant & Machinery.	**Suppliers.** (*Copyright.*)
Openers and Scutchers ..	Lord Brothers, and Platt Bros. & Co., Ltd.
Cards	Tweedales & Smalley.
Drawing Frames	Do.
Roving Frames	Do.
Ring Frames	Do.
Mules	Asa Lees & Co., Ltd., Oldham.
Winding and Warping ..	Universal Winding Co., Howard & Bullough, Henry Livesey and Robert Hall.
Sizing	Butterworth & Dickinson, Howard & Bullough, Robert Hall and Harling & Todd.
Looms	Robert Hall, Platt Bros., George Keighley, Willan & Mills, Hacking & Co and Henry Livesey.
Dyeing	Franklin Process & Co., U.S.A.
Humidifiers	Mather & Platt, Ltd., Manchester.
Sprinklers	Mather & Platt, Hoffmann Sprinkler Co. and George Mills.
Boilers	John Musgrave & Sons, Ltd., Bolton.
Electric Motors	Swedish General Electric Co.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

MEYER SASSOON MILLS, LTD.

Started in 1897 as NARANJI MILL. Converted into MEYER SASSOON in 1910.

REGISTERED OFFICE :—DOUGALL ROAD, BALLARD ESTATE, BOMBAY.

Telegrams : "SPINDLES," BOMBAY. Phone : 26511.

Directors :

Sir Victor Sassoon, Bart.
A. J. Raymond.
H. A. H. Payne.
Rao Saheb Khimji Cooverji.
S. R. Bomanji.
F. E. Dinshaw.
N. P. Whaddia.
Albert Raymond.

Agents :

E. D. Sassoon & Co., Ltd.

Secretary :

C. C. G. Uwins.

Solicitors :

Payne & Co.

Auditors :

A. F. Ferguson & Co.
S. B. Billimoria & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 10,00,000 divided into 10,000 Ordinary Shares of Rs. 100 each. Issued, Rs. 10,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital	10,00,000	10,00,000	10,00,000	10,00,000	10,00,000
Debenture	12,00,000	12,00,000	12,00,000	12,00,000	12,00,000
Debt Loans	10,19,561	13,13,112	27,99,409	47,14,135	37,42,500
Reserve Funds	3,40,000	6,90,000	11,11,964	14,08,962	14,09,785
Land & Building ..	8,09,574	8,48,772	10,37,953	12,36,494	12,93,829
Plant & Machinery ..	17,37,842	16,83,359	23,94,367	29,68,041	34,03,694
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	71,015
Profits	12,11,374	13,13,764	10,75,478	3,18,075	*Nil.*
Dividend { Per Share ..	50	50	50	10	*Nil.*
Dividend { Bonus ..	—	5	—	—	—

Meyer Sassoon Mills Ltd.—*contd.*

Mill : Ferguson Road. **Phone :** Office, 26511. Mill Extension, 44.

Spindles : Ring, 30,384. Mule, 11,928. 42,312. **Looms,** 1,012. **Hands,** 2,342.

Yarn Spun : 2*s* to 40*s* and Cotton Waste. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton, Stores, Coal and Liquid Fuel, Electric Energy, etc. ..	38,82,851	Salaries and Wages at Mill and Office	8,22,621
		Agents' Remuneration (Waived on account of loss) ..	36,000
		Interest	2,70,588

Due to E. D. Sassoon & Co., Ltd., Rs. 29,40,554.

Mill Staff. (*Copyright.*)

Manager ..	.. A. J. Hallegua.	Spinning Master	.. N. M. Kadam.
Asstt. Manager	.. E. E. Salem.	Weaving Master	.. M. R. Chawan.
Carding Master	.. F. Ramsden.	Calenderer ..	.. C. Butterworth.

Plant & Machinery.	Suppliers. (*Copyright.*)
Openers and Scutchers ..	Lord Bros. and Taylor Lang.
Cards and Drawing Frames	Howard & Bullough.
Roving Frames .. Ring Frames ..	Do. and Brooks & Doxey
Mules	Taylor, Lang & Co.
Winding	Joseph Stubbs, Universal Winding Co., Wm. Dickinson, Robert Hall, Thomas Holt and Henry Livesey.
Warping	Henry Livesey and Thomas Holt.
Sizing	Howard & Bullough and Henry Livesey.
Looms	Henry Livesey, George Keighley and Butterworth & Dickinson.
Finishing	Sir James Farmer Norton & Co., Ltd.
Dyeing	Franklin Process Co.
Humidifiers Sprinklers	Mather & Platt, Ltd.
Boilers	Tinker Shenton.
Electric Motors	Swedish General Electric Co.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

DAVID MILLS CO., LTD.

(Nos. 1 & 2 MILLS.)

DAVID No. 1 started in 1888 and DAVID No. 2 in 1899.

REGISTERED OFFICE :—DOUGALL ROAD, BALLARD ESTATE, BOMBAY.

Telegrams : " SPINDLES," BOMBAY. Phone : 26511.

Directors :

Sir Victor Sassoon, Bart.
Sir Fazulbhoy Currimbhoy, Kt.
A. J. Raymond.
F. E. Dinshaw.
Hon'ble Pheroze C. Sethna, O.B.E.
Albert Raymond.

Agents :
E. D. Sassoon & Co., Ltd.
Secretary :
C. C. G. Uwins.
Solicitors :
Payne & Co.
Auditors :
S. B. Billimoria & Co.
Sorab S. Engineer & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 24,00,000 divided into 1,800 old Ordinary Shares of Rs. 500 each and 6,000 new Ordinary Shares of Rs. 250 each.

Issued, Rs. 24,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	24,00,000	24,00,000	24,00,000	24,00,000	24,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	52,96,196	39,49,950	53,44,049	74,90,627	49,62,152
Reserve Funds	56,49,468	60,77,787	65,16,921	32,79,743	32,79,013
Land & Buildings ..	24,46,810	26,11,838	27,09,718	22,11,546	24,31,281
Plant & Machinery ..	41,29,623	45,42,913	50,69,407	27,97,949	31,57,378
Loss	*Nil.*	*Nil.*	*Nil.*	4,70,397	1,86,937
Profits	41,16,172	24,48,225	10,31,906	*Nil.*	*Nil.*
Dividend per Share ..	260	190	65	*Nil.*	*Nil.*

David Mills Co., Ltd.—*contd.*

(Nos. 1 and 2.)

Mills : Carroll Road, Parel. **Phone :** 40843.

Spindles : Ring, 51,624 ; ,, 13,536 ; Mule, 17,466 } 82,626. **Looms,** 1,130. **Hands,** 3,615.

Yarn Spun : 2*s* to 40*s* and Cotton Waste. **Cloth :** Grey, Bleached, and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton, Stores, Coal, Liquid Fuel, Tata Hydro-Electric Energy	66,34,609	Salaries and Wages at Mill and Office	11,95,222
		Agent's minimum Remuneration (Waived voluntarily.)	12,000
		Interest	3,71,593

Due to E. D. Sassoon & Co., Ltd.; Rs. 38,18,094.

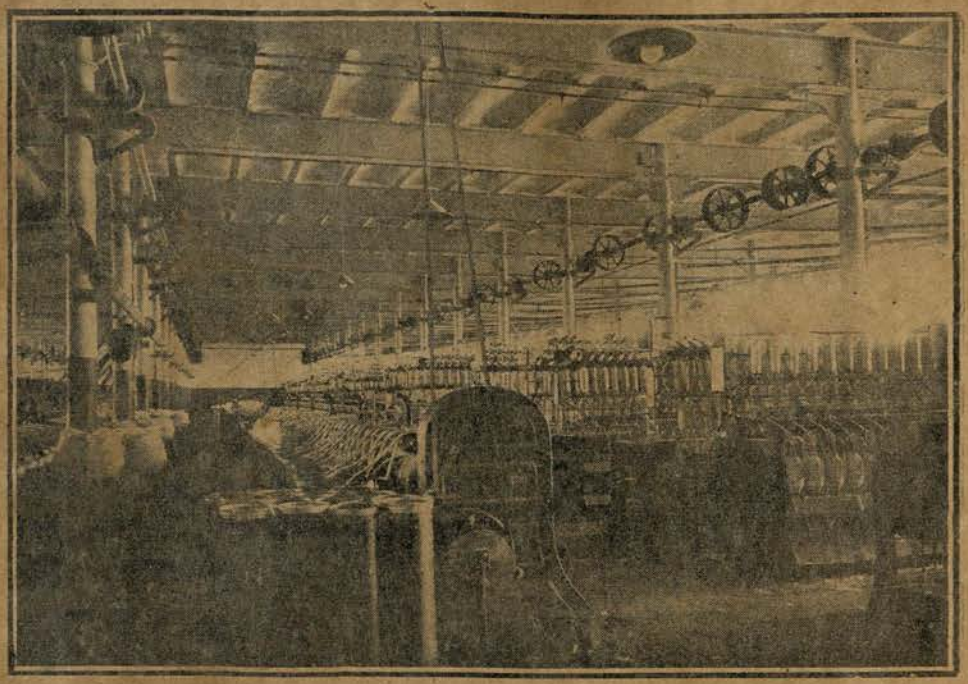
Mill Staff. (*Copyright.*)

Manager	G. C. Abbott.	Weaving Master	S. J. Levy.
Asstt. Manager	J. E. Meyer.	Dyer	P. R. Sapre.
Carding Master	G. C. Abbott.	Mechanical and Electrical Engineer	J. L. Hendricks.
Spinning Master	F. DeSouza.		

Plant and Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers	Lord Brothers.
Cards	Howard & Bullough.
Drawing Frames, Roving Frames	Platt Bros., Asa Lees and Lord Bros.
Ring Frames	Asa Lees, Lord Bros., Tweedales & Smalley and Howard & Bullough.
Mules	Asa Lees (Cotton Mules), Taylor Lang (Waste Mules)
Winding and Warping	Platt Bros., Henry Livesey, William Dickinson and Willan & Mills.
Sizing	Howard & Bullough and Harling & Todd.
Looms	Willan & Mills, Henry Livesey, Gregson & Monk, Butterworth & Dickinson, Ward Bros., Hattersley, Cook & Co. and George Keighley.
Dyeing	Franklin Process Co.
Humidifiers	Herbert Smethurst & Sons, Ltd., Hollinwood.
Sprinklers	Mather & Platt, Ltd., Manchester.
Boilers	Hick, Hargreaves and Tinker Shenton.
Electric Generators	General Electric Co.
Electric Motors	Swedish General Electric Ld., British Westinghouse and Metropolitan-Vickers.

Mills driven electrically by the Tata Hydro-Electric Power Supply.



[Photo Copyright.

THE EDWARD SASSOON MILLS : THE ROVING FRAMES.

[Photo Copyright.

THE DAVID MILLS—1925.

From an Enlargement.

THE LATE SIR JACOB SASSOON, BARONET.

Sir Jacob Sassoon, Baronet, head of the firm of Messrs. E. D. Sassoon & Co., was a large millowner, merchant and philanthropist. He was well known in this country, and his death has been largely mourned by the members of his community for whose comfort and welfare he gave liberally. Sir Jacob's public charities have been of a catholic nature, his contributions being given for educational, benevolent and industrial purposes.

APOLLO MILLS, LTD.

Started in 1874 as the ANGLO-INDIAN, LD. Converted into the APOLLO (Private) in 1893 and formed into APOLLO MILLS, LD., in 1920.

REGISTERED OFFICE :—DOUGALL ROAD, BALLARD ESTATE, BOMBAY.

Telegrams : " SPINDLES," BOMBAY. Phone : 26511.

Directors :

Sir Victor Sassoon, Bart.
A. J. Raymond.
N. G. Hunt.
D. L. Vaidya.
F. E. Dinshaw.
Ambalal Sarabhai.
Albert Raymond.

Agents :
E. D. Sassoon & Co., Ltd.

Secretary :
C. C. G. Uwins.

Solicitors :
Captain & Vaidya.

Auditors :
S. B. Billimoria & Co.
C. H. Sopariwala & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 25,00,000 divided into 50,000 Ordinary Shares of Rs. 50 each. Issued, Rs. 25,00,000.

	1921.	1922.	1923.	1924.	1925.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	25,00,000	*25,00,000	25,00,000	25,00,000	25,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	20,00,000
Debt Loans	11,36,864	14,55,959	35,39,485	44,77,399	35,33,386
Reserve Funds	*Nil.*	16,40,000	18,05,687	18,05,658	18,04,452
Land & Building ..	10,02,914	10,02,046	9,70,336	17,77,579	18,08,779
Plant & Machinery ..	35,04,447	33,31,424	31,01,958	40,76,296	45,34,143
Loss	*Nil.*	*Nil.*	*Nil.*	1,07,055	3,60,514
Profits	22,01,603	14,65,360	3,58,705	*Nil.*	*Nil.*
Dividend per Share ..	*Nil.*	14	*Nil.*	*Nil.*	*Nil.*

* 50,000 Shares of the nominal value of Rs. 100 each reduced to Rs. 50 per share

Apollo Mills Ltd.—*contd.*

Mill : DeLisle Road. **Phone :** 40132.

Spindles : Ring, 37,688 / Mule, 1,966 } 39,654. **Looms,** 896. **Hands,** 2,440.

Yarn Spun : 2s to 40s and Cotton Waste. **Cloth :** Grey, Bleached, and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton, Stores, Coal, Electric Energy	33,02,200	Salaries and Wages at Mill and Office	4,97,108
		Agents' Office Allowance	24,000
		Interest	1,58,480

Due to E. D. Sassoon & Co., Ltd., Rs. 40,95,515.

Mill Staff. (*Copyright.*)

Manager	B. S. Pednekar.	Weaving Master	W. Dyson.
Asstt. Manager	J. Mendonca.	Dyer	V. L. Ranade.
Carding Master	F. J. Lisboa.	Mechanical and Electrical Engineer	V. B. Chitnis.
Spinning Masters	V. S. Pednekar and Raghunath Shanker.		

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers	Howard & Bullough, Ltd., Accrington.
Cards	Platt Bros., Howard & Bullough, Asa Lees.
Drawing Frames, Roving Frames, Ring Frames	Howard & Bullough and Platt Bros.
Mules	Taylor Lang & Co., Ltd., Stalybridge.
Winding and Warping	Harling & Todd, Ltd., Burnley.
Sizing	Do. do.
Looms	George Keighley, Ltd., Burnley.
Finishing	Mather & Platt, Ltd., Manchester.
Dyeing	Franklin Process Co., Boston, U.S.A.
Humidifiers	Peter Brotherhood, Ltd., and Hall & Kay, Ltd.
Sprinklers ("Grinnell")	Mather & Platt, Ltd. Manchester.
Boilers	E. D. Heaton & Co. and Thomas Beeley & Son.
Electric Motors	Swedish Electric and Westinghouse Electric International Co.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

ELPHINSTONE SPG. AND WVG. MILLS CO., LTD.

Started in 1897 as TAPIDAS MILLS. Converted into ELPHINSTONE MILL in 1902.

REGISTERED OFFICE :—DOUGALL ROAD, BALLARD ESTATE, BOMBAY.

Telegrams : " SPINDLES," BOMBAY. Phone : 26511.

Directors :

Sir Victor Sassoon, Bart.
A. J. Raymond.
Hooseinbhoy A. Laljee.
Osman Sobani.
D. L. Vaidya.
F. E. Dinshaw.
Albert Raymond.

Agents :
E. D. Sassoon & Co., Ltd.

Secretary :
C. C. G. Uwins.

Solicitors :
Captain & Vaidya.

Auditors :
S. B. Billimoria & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 50,00,000 divided into 25,000 7 % Cumulative Shares of Rs. 100 each and 25,000 Ordinary Shares of Rs. 100 each.

Issued, Rs. 50,00,000.

	1921.	1922.	1923.	1924.	1925.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	50,00,000	50,00,000	50,00,000	50,00,000	50,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	12,07,945	16,85,378	44,45,483	31,04,612	16,16,219
Reserve Funds	1,41,000	4,25,000	5,13,974	6,21,104	6,22,351
Land & Building ..	13,12,800	12,94,353	12,90,723	12,80,411	12,81,465
Plant & Machinery ..	36,16,958	36,71,264	36,80,549	35,64,463	35,74,515
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	20,45,009	13,24,232	7,24,345	1,99,191	1,42,881
Dividend per Share ..	40	25	8-8-0	*Nil.*	*Nil.*

Elphinstone Spg. and Wvg. Mills Co., Ltd.—*contd.*

Mill : Elphinstone Road. **Phone :** 40951.

Spindles : Ring, 35,056 / Mule, 14,008 } 49,064. **Looms,** 764. **Hands,** 2,715.

Yarn Spun : 2s to 40s and Cotton Waste. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1924.

	Rs.		Rs.
Cotton		Salaries and Wages at Mill and Office	8,51,602
Stores			
Coal	34,82,657	Agents' Remuneration and Office Allowance ..	40,132
Liquid Fuel, etc.			
Tata Hydro-Electric Energy		Interest	1,65,142

Due to E. D. Sassoon & Co., Ltd., Rs. 26,00,412.

Mill Staff. *(Copyright.)*

Manager ..	D. G. Patil.	Weaving Master	T. Ashworth.
Asstt. Manager ..	K. B. Samant.	Dyer	M. S. Gindill.
Carding Master ..	G. Govind	Mechanical Engineer	C. R. Baxter.
Spinning Master ..	R. L. Padwal.		

Plant & Machinery.	Suppliers. *(Copyright.)*
Openers and Scutchers ..	Platt Brothers, Brooks & Doxey, Taylor Lang and Lord Bros.
Cards	Brooks & Doxey, Platt Bros., Elijah Ashworth, Howard & Bullough and William Tatham.
Drawing Frames	Brooks & Doxey, Platt Bros. and Howard & Bullough.
Roving Frames	John Hetherington, Platt Bros. and Tweedale & Smalley.
Ring Frames	Brooks & Doxey, Howard & Bullough and Tweedale & Smalley.
Mules	John Hetherington, Platt Bros. and Asa Lees.
Winding and Warping ..	Howard & Bullough, Harling & Todd and Hacking & Co.
Sizing	William Dickinson, Howard & Bullough and Harling & Todd.
Looms	Hacking & Co. and Henry Livesey, Ltd.
Finishing	J. H. Riley & Co. and Sir James Farmer & Co.
Dyeing	Franklin Process Co. and J. H. Riley & Co.
Humidifiers	Mather & Platt and Hall & Kay.
Sprinklers	Hoffman Sprinkler Co.
Steam Engine	John Musgrave & Sons, Ltd., Bolton.
Electric Dynamos ..	Reavell & Co.

Mills driven electrically by the Tata Hydro-Electric Supply.

SASSOON SPINNING AND WEAVING CO., LTD.

Started in 1874.

REGISTERED OFFICE :—No. 59, FORBES STREET, FORT, BOMBAY.

Telegrams : "SASSOONS," BOMBAY. Phone : 20025.

Directors :

H. H. Sawyer.
S. Wood.
F. R. Wadia.
Ishwardas Lukhmidas.
Sir Mahomed Hajeebhoy, Kt.

Agents :
David Sassoon & Co., Ltd.
Secretary :
F. R. Mistree.
Auditors :
A. F. Ferguson & Co.
Nagindas P. Mehta.
Solicitors :
Wadia Ghandhy & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 22,50,000 divided into 22,500 Ordinary Shares of Rs. 100 each. Issued Capital, Rs. 22,50,000 in 22,500 Ordinary Shares of Rs. 100 each.

	1920.	*1921.	†1922.	‡1923.	§1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	22,50,000	22,50,000	22,50,000	22,50,000	22,50,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	8,82,445	7,23,381	18,30,435	23,45,053	44,11,157
Reserve Funds	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Land & Building	4,08,689	1,25,707	8,47,531	14,16,983	17,23,421
Plant & Machinery ..	8,21,864	1,45,456	6,60,613	14,22,551	22,76,176
Loss	*Nil.*	*Nil.*	4,08,673	*Nil.*	7,10,224
Profits	14,11,177	8,89,664	*Nil.*	1,47,599	*Nil.*
Dividend per Share ..	35	15	*Nil.*	*Nil.*	*Nil.*

* Spinning Department burnt by fire in March, 1921.
† Spinning Department under construction, 1922.
‡ Mill closed 1923.
§ Mill commenced working from March, 1924.

Sassoon Spinning and Weaving Co., Ltd.—*contd.*

Mill : Mazgaon. **Phone :** 40868.

Spindles : Ring, 58,016 / Mule, 2,224 } 60,240. **Looms,** 1,222. **Hands,** 3,000.

Yarn Spun : **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton .. Yarn .. Stores .. Coal .. Electric Energy	 25,53,541	Salaries and Wages at Mill	5,94,063
		Office Establishment ..	20,844
		Agents' Remuneration ..	21,360
		Interest	2,29,373

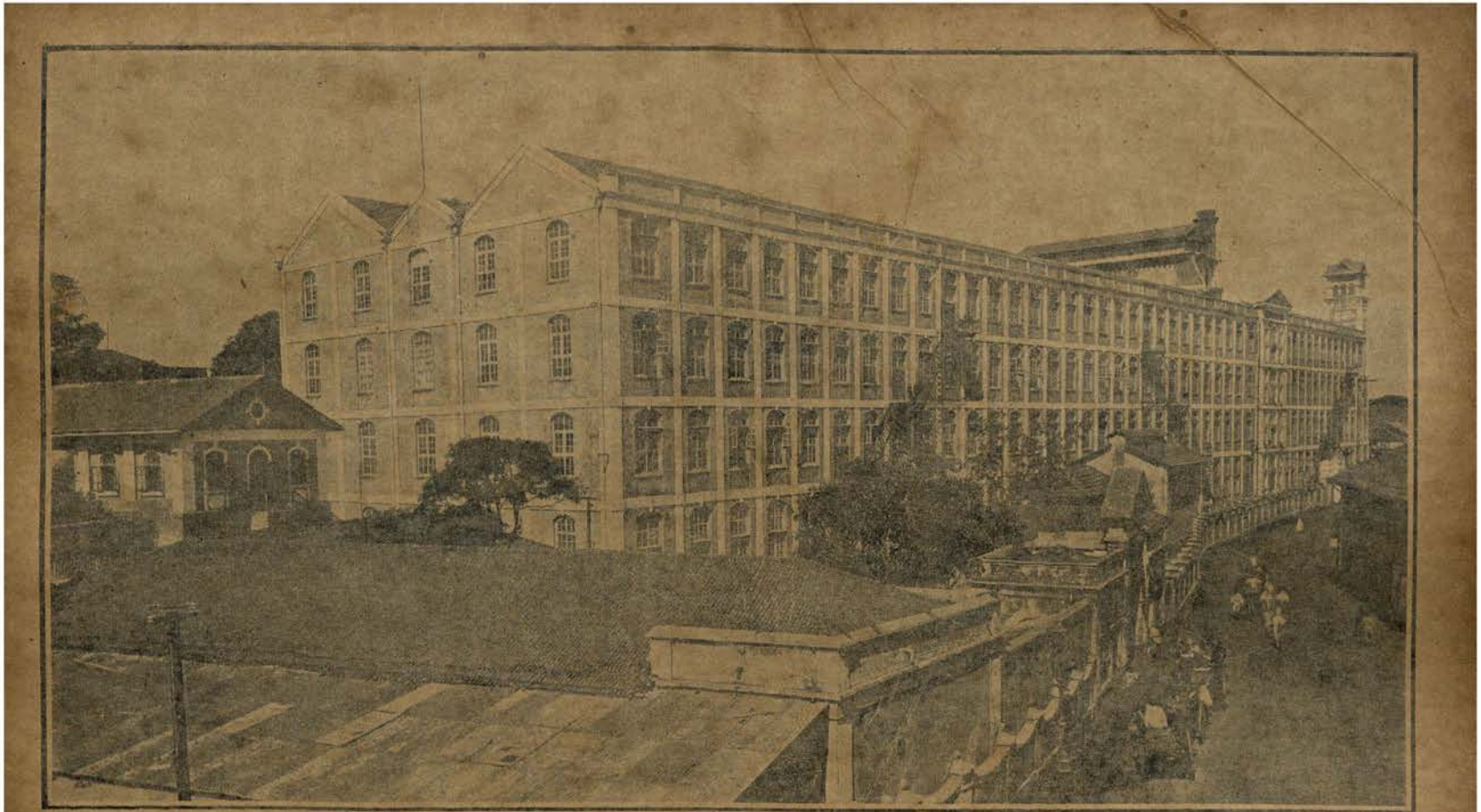
Due to David Sassoon & Co., Ltd., Rs. 41,03,487.

Mill Staff. (*Copyright.*)

Manager ..	.. James Howley.	Assistant Carding & Sping. Master	C. Wood.
Carding & Spg. Master	.. J. Kinsey.		
Weaving Master	.. T. Hargreaves.	Mechanical Engineer	.. J. N. Rabadi.

Plant & Machinery.	Suppliers. (*Copyright.*)
Openers and Scutchers ..	Lord Brothers and Howard & Bullough.
Cards	Elijah Ashworth and Do.
Drawing Frames, Roving Frames, Ring Frames ..	Howard & Bullough and Brooks & Doxey.
Mules	Asa Lees & Co., Ltd.
Winding, Warping, Sizing	Henry Livesey, Ltd.
Looms	Do. and Wm. Dickinson.
Finishing	J. H. Riley & Co. and Lang Bridge & Co.
Humidifiers	Herbert Smethurst & Sons.
Sprinklers	Mather & Platt.
Boilers	Thomas Beeley & Sons, Ltd.
Electric Motors	Metropolitan-Vickers, Ltd.

Mill driven electrically by the Andhra Valley Power Supply.



[Architect: Messrs. Tataporewalla and Baroocha.

THE SASSOON SPINNING AND WEAVING MILLS AS RENOVATED IN 1925.

Mr. H. H. SAWYER.

Mr. A. G. DOVEY.

Managing Directors.

DIRECTORS AND OFFICIALS OF THE SASSOON SPINNING AND WEAVING CO., LTD., 1908.

Sitting left to right.—Messrs. Ardeshir Dalal, Ishwardas Lukhmidas, P. G. Singhanee, A. H. Compton, A. Johnson, T. Powell, A. G. Dovey, S. M. Moses (Charles Nissim), Meyer Nissim, Joseph Moses, J. Owen, P. R. Mody, Sassoon Nissim, Abraham Meyer.

UNION MILLS, LTD.

Started in 1888.

REGISTERED OFFICE :—No. 59, FORBES STREET, FORT, BOMBAY.

Telegrams : " SASSOONS," BOMBAY. Phone : 22971.

Directors :

H. H. Sawyer.
F. R. Wadia.
Ishwardas Lukhmidas.
Sir Mahomed Hajeebhoy, Kt.
Sidney Wood.

Agents :
David Sassoon & Co., Ltd.
Secretary :
R. D. Master.
Auditors :
A. F. Ferguson & Co.
Nagindas P. Mehta.
Solicitors :
Wadia Ghandhy & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 15,00,000 divided into 2,000 Ordinary Shares of Rs. 250 each. Issued, 2,000 Shares of Rs. 250 each=Rs. 5,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	5,00,000	5,00,000	5,00,000	5,00,000	5,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	21,49,297	16,13,948	22,57,525	20,64,266	31,49,462
Reserve Funds	10,000	90,000	89,500	1,19,200	1,19,200
Land & Building * ..	6,22,118	5,26,771	4,96,771	5,18,422	5,23,471
Plant & Machinery * ..	6,60,519	4,86,889	3,95,443	5,20,693	7,00,460
Loss	*Nil.*	*Nil.*	*Nil.*	2,36,403	6,59,680
Profits	9,85,754	9,10,520	2,27,709	*Nil.*	*Nil.*
Dividend per share ..	125	125	45	*Nil.*	*Nil.*

* After allowing for Depreciation.

Union Mills Ltd.—*contd.*

Mill : DeLisle Road. **Phone :** 40817.

Spindles : Ring, 32,696 / Mule, 5,480 } 38,176. **Looms,** 866. **Hands,** 1,966.

Yarn Spun : **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton .. Yarn .. Stores .. Coal .. Electric Energy	.. 35,58,619	Salaries and Wages at Mill and Office	6,96,023
		Agents' Remuneration ..	12,000
		Interest	1,94,870

Due to David Sassoon & Co., Ltd., Rs. 16,51,649.

Mill Staff. *(Copyright.)*

Manager ..	.. A. Parry.	Weaving Master	.. J. B. Khajotia.
Carding and Spinning Master	.. J. A. Shroff.	Mechanical and Elect. Engineer	.. N. A. Shroff.

Plant & Machinery. — Suppliers. *(Copyright.)*

Openers and Scutchers ..	Lord Bros.
Cards	Elijah Ashworth, Ltd. and Dobson & Barlow.
Drawing Frames / Roving Frames ..	Brooks & Doxey.
Ring Frames	Do. and Howard & Bullough.
Mules	Asa Lees & Co.
Winding and Warping ..	Joseph Stubbs, Brooks & Doxey, and Wm. Dickinson and Son.
Sizing / Looms	Wm. Dickinson & Sons.
Finishing	J. H. Riley & Co.
Dyeing	Thomas Broadbent & Co.
Humidifiers	F. W. Brackett & Co.
Sprinklers	Mather & Platt, Ltd.
Boilers	James Howden, and Mackie & Buxler.
Electric Motors	Metropolitan-Vickers, Ltd.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

NEW CITY OF BOMBAY MANUFACTURING CO., LTD.

Started in 1883 as the CITY OF BOMBAY and reconstructed in 1905 as the NEW CITY OF BOMBAY.

REGISTERED OFFICE :—12/14, CHURCH GATE STREET, FORT, BOMBAY.

Telegrams : " BRAD," BOMBAY. Phone : 25036. 25037.

Directors :

J. A. Kay, M.L.C.
Byramjee Jeejeebhoy.
Sir Jamsetjee Jeejeebhoy, Bart., K.C.S.I.
Harry T. Gorrie.
Douglas Forrest.
D. Moir.

Managing Agents :

W. H. Brady & Co., Ltd.

Auditors :

A. F. Ferguson & Co.

Solicitors :

Daphtary, Ferreira & Divan.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 10,00,000 divided into 10,000 Shares of Rs. 100 each.
Issued, 6,000 Shares of Rs. 100 each.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	6,00,000	6,00,000	6,00,000	6,00,000	6,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	10,90,815	12,14,400	16,62,700	24,83,700	18,32,100
*Reserve Funds ..	6,15,000	10,05,000	12,05,000	7,00,000	7,19,565
Land & Building ..	3,60,904	6,19,602	4,94,337	4,54,654	4,79,245
Plant & Machinery ..	4,50,795	6,70,753	6,23,306	11,10,134	11,50,801
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	32,896
Profits	14,45,926	8,08,033	5,25,759	47,275	*Nil.*
Dividend per Share ..	160	100	70	10	10

* Reserve allocated in 1922 to Building, Rs. 1,50,000; Plant, Rs. 4,40,000 = Rs. 5,90,000.

New City of Bombay Manufacturing Co., Ltd.—*contd*

Mill : Chinchpoogly. **Phone :** 40853.

Spindles : Ring, 43,128; Doubling, 4,032 } 47,160; **Looms,** *Nil.* **Hands,** 1,60

Yarn Spun : 10s to 30s single and double.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	33,85,746	Salaries and Wages at Mill and Office	4,38,833
Stores	1,19,798	Agents' Remuneration ..	*Nil.* (Loss)
Liquid Fuel	18,957	Interest	1,15,763
Hydro-Electric Energy ..	70,424		

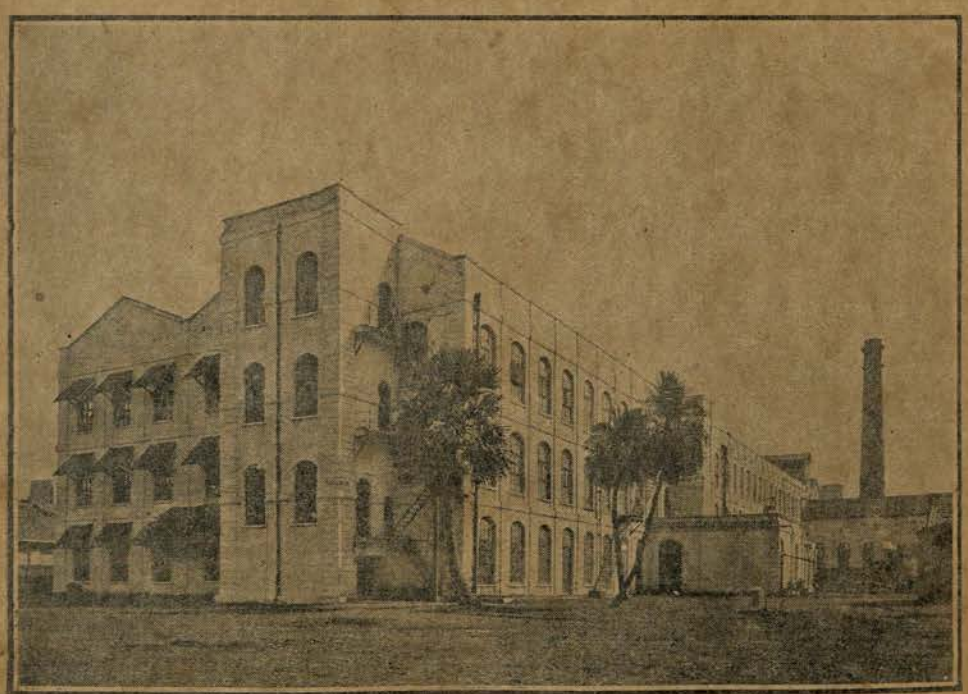
Mill Staff. *(Copyright.)*

Manager ..	R. Blackwell.	Mech. Engineer ..	P. A. Bhathena.
Carding and Spinning Master	B. S. Khambatta.	Elect. Engineer ..	J. W. Cheetham.

Plant & Machinery.	Suppliers. *(Copyright.)*
Openers and Scutchers, Cards .. .., Drawing Frames .., Roving Frames .., Ring Frames ..	Asa Lees & Co., Ltd., Oldham.
Winding "Lessona" ..	Universal Winding Co., Boston, U. S A.
Humidifiers	Herbert Smethurst & Sons, Ltd., Hollinwood.
Sprinklers	Hoffman Sprinkler Co., Ltd., Manchester.
Boilers	Hick, Hargreaves & Co. and Thomas Beeley & Son.
Electric Motors	Mather & Platt, Ltd., Manchester.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

Mr. W. H. BRADY.



[Architects: Messrs. Taraporevala and Bharucha.

THE NEW CITY OF BOMBAY MILLS.

THE LATE MR. J. F. BRADBURY.

MR JOHN KNOWLES, M.I.M.E.

STAFF OF THE COLABA LAND MILL IN 1895.

SITTING (*From left to right*)—Head Jobber; Mr. F. K. Mehta; Mr. Ardeshir Printer; Mr. Sorabji Ghasvala; Mr. N. K. Mehta (*Weaving Master*); Mr. Khan Mahomed; Mr. B. B. Sunavalla; Mr. Ardeshir Fitter; Head Jobber.

N. B.—Mr. Framji Bouchia, sitting on the ground (second from left), is now at the Bombay United Mills.

COLABA LAND & MILL CO., LTD.

Started in 1874.

(INCLUDES JEHANGIR WADIA MILLS.)

REGISTERED OFFICE :— 12/14, CHURCH GATE STREET, FORT, BOMBAY.

Telegrams : "BRAD, BOMBAY." Phone : 25036 / 25037

Directors:

Joseph A. Kay, M.L.C.
Sir Jamsetjee Jejeebhoy, Bart., K.C.S.I.
D. Moir.
Harry T. Gorrie.
Byramjee Jeejeebhoy.
Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E.

Agents :

W. H. Brady & Co., Ltd.

Auditors:

A. F. Ferguson & Co.
J. E. Aspinwall & Co.

Solicitors :

Crawford Bayley & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 50,00,000 divided into 50,000 Ordinary Shares of Rs. 100 each. Issued, Rs. 28,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	28,00,000	28,00,000	28,00,000	28,00,000	28,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	14,35,100	16,05,800	15,69,800	20,41,460	17,99,272
Reserve Funds	18,67,000	18,71,536	23,29,998	24,04,404	24,08,752
Land & Buildings* ..	25,88,783	27,96,204	28,42,981	27,34,022	27,23,558
Plant & Machinery* ..	10,53,253	10,26,843	10,19,694	10,10,456	11,21,049
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	28,75,843	21,10,652	12,85,067	3,78,617	33,697
Dividend { Per Share .	400	220	190	10	7½
Dividend { Per Cent..	57	31	27	10	
	Shares of Rs. 700 each.			Split up shares of Rs. 100 each.	

*After writing off Depreciation.

Colaba Land and Mill Co., Ltd.—*contd.*

Mill : Arthur Bunder, Colaba. Phone : 20150.

Spindles : Ring, 44,792. Looms, 697. Hands, 2,424.

Yarn Spun : 4*s* to 28*s*. Cloth : Grey and Coloured.

Principal Items of Working Expenses in 1923-24.

	Rs.		Rs.
Cotton	36,06,331	Oil Fuel	64,396
Salaries and Wages (Mill and Office)	7,58,157	Hydro-Electric Power ..	85,860
Stores	2,83,062	Agents' Commission ..	4,406

Mill Staff. (*Copyright.*)

Manager .. .. F. P. Shroff.

Carding Master } Framji D. Hathiram and
Spinning Master } Dinshaw Rustomji (Assistant).

Weaving Master .. Merwanji Framji.

Mechanical Engineer .. L. K. Jaya.

Electrical Engineer .. J. W. Cheetham.

Superintendent, J. Tinker. .. Asstt. Supdt., K. S. Daver.

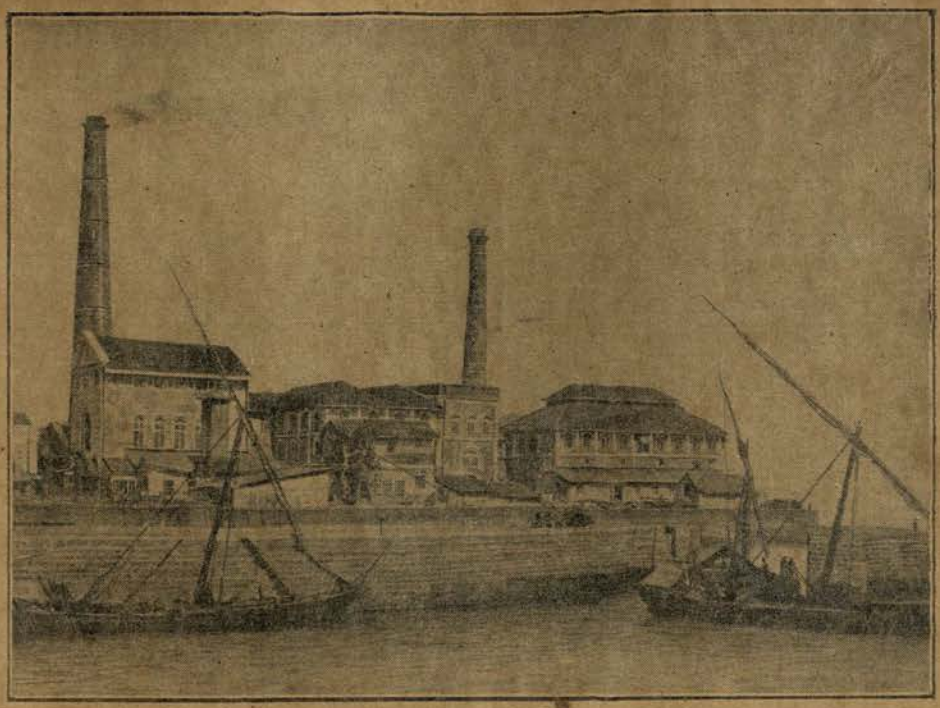
Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers ..	Asa Lees & Co., Ltd., Oldham.
Cards	Platt Bros. & Co., Ltd., and Asa Lees & Co., Ltd.
Drawing Frames ..	
Roving Frames ..	
Ring Frames ..	
Winding and Warping ..	George Keighley, Ltd., Burnley, and Howard & Bullough, Ltd., Accrington.
Sizing } .. .. .. Looms }	George Keighley, Ltd., Burnley.
Finishing	John Downham & Co., Bury.
Humidifiers	Herbert Smethurst & Sons, Ltd., Hollingwood.
Sprinklers	Hoffmann Sprinkler Co., Ltd., Manchester.
Boilers	John Musgrave & Sons, Ltd., Bolton.
Electric Motors	Mather & Platt, Ltd., Manchester.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

COLABA LAND MILLS. LAYING THE FOUNDATION-STONE OF THE JEHANGIR WADIA MILLS IN 1882.

Left to right :— (Sitting) Mr. James Douglas ; Mr. E. Edwards ; R. D. Parekh Brothers. (Standing) Mr. N. M. Wadia, C.I.E. ; Mr. D. D. Mistry ; Mr. K. R. Kama. (Sitting) Mr. S. S. Bengalee, C.I.E.; Hon. Mr. Naoroji N. Wadia., C.I.E. ; Sir Jamsetji Jeejeebhoy, Bart ; Mr. Sorabji F. Patel ; Mr. Damodhar Tapidas ; Mr. Jehangir Mody and Mr. Dayabhai Tapidas.
(Standing on Platform) Mr. J. Lancaster ; Mr. M. M. Mehta ; Mr. R. N. Vacha and Mr. A. C. Wadia.



THE COLABA LAND MILL IN 1875.

[Photo : Copyright.

THE COLABA LAND MILL IN 1925.

NEW GREAT EASTERN SPG. & WVG CO., LTD.

Started in 1860.

REGISTERED OFFICE :—12/14, CHURCH GATE STREET, FORT, BOMBAY.

Telegrams : " BRAD, BOMBAY."

Phones : 25036. 25037.

Directors :

Joseph A. Kay, M.L.C.
Sir Jamsetjee Jeejeebhoy, Bart.
Shantidas Askuran.
Harry T. Gorrie.
Byramjee Jeejeebhoy.
D. Moir (*ex-officio*).

Agents :

W. H. Brady & Co., Ltd.

Auditors :

Merwanjee Hormasjee Nicholson.
Nagindas Pranjivandas Mehta.

Solicitors :

Daphtary, Ferreira & Divan.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 23,00,000 divided into 4,000 Preference Shares of Rs. 200 each and 7,500 Ordinary Shares of Rs. 200 each.

Issued, Subscribed and Paid-up Rs. 23,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	23,00,000	23,00,000	23,00,000	23,00,000	23,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	10,32,652	10,00,243	8,47,030	18,45,451	17,01,198
Reserve Funds	4,11,844	5,11,844	8,08,304	10,08,304	10,08,304
*Land & Building ..	8,10,743	9,05,716	11,78,680	12,95,833	12,95,430
*Plant & Machinery ..	12,90,075	13,08,106	14,35,528	15,57,482	15,59,955
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Gross Profits	17,51,252	17,93,910	11,26,507	4,00,754	1,90,986
Dividend per Ord. Share	110	110	65	10	10

* After writing off Depreciation.

New Great Eastern Spg. & Wvg. Co., Ltd.—*contd.*

Mill : Chinchpoogly. **Phone :** 40821.

Spindles : Ring, 35,148 / Mule, 14,520 } 49,668. **Looms,** 1,058. **Hands,** 2,590.

Yarn Spun : 4s to 28s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	36,24,434		
Stores	2,52,818	Office Establishment ..	16,043
Coal and Liquid Fuel ..	47,953	Office Allowance	12,000
Electric Energy	93,189	Agents' Remuneration ..	26,041
Salaries and Wages at Mill	7,67,144 / 89,533	Interest	72,050

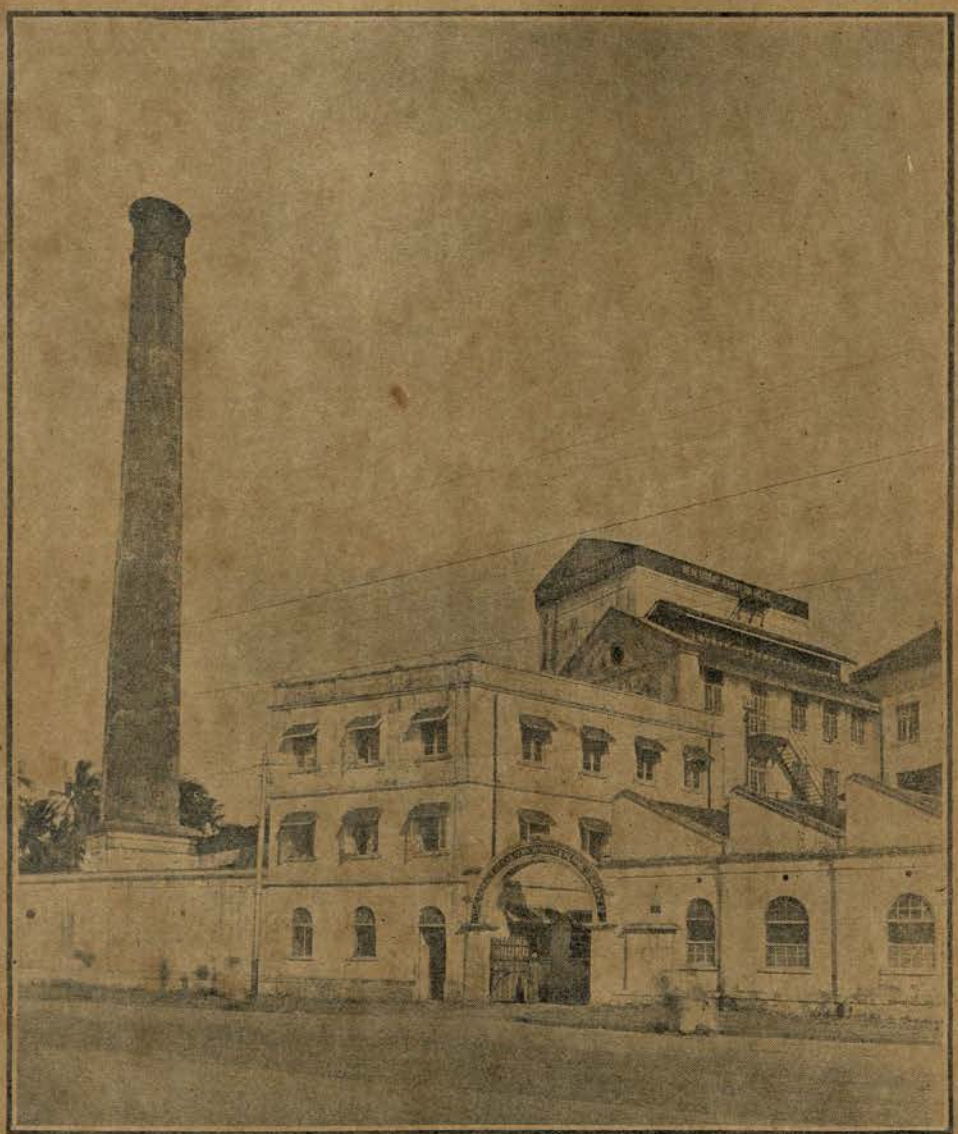
Mill Staff. (*Copyright.*)

Manager ..	R. A. Wadia.	Finisher and Dyer ..	P. P. Bharucha.
Carding and Spinning Master ..	R. J. Popat.	Mech. Engineer	N. D. Bitla.
Weaving Master	B. D. Patell.	Elect. Engineer	J. W. Cheetham.

Plant & Machinery. — Suppliers. (*Copyright.*)

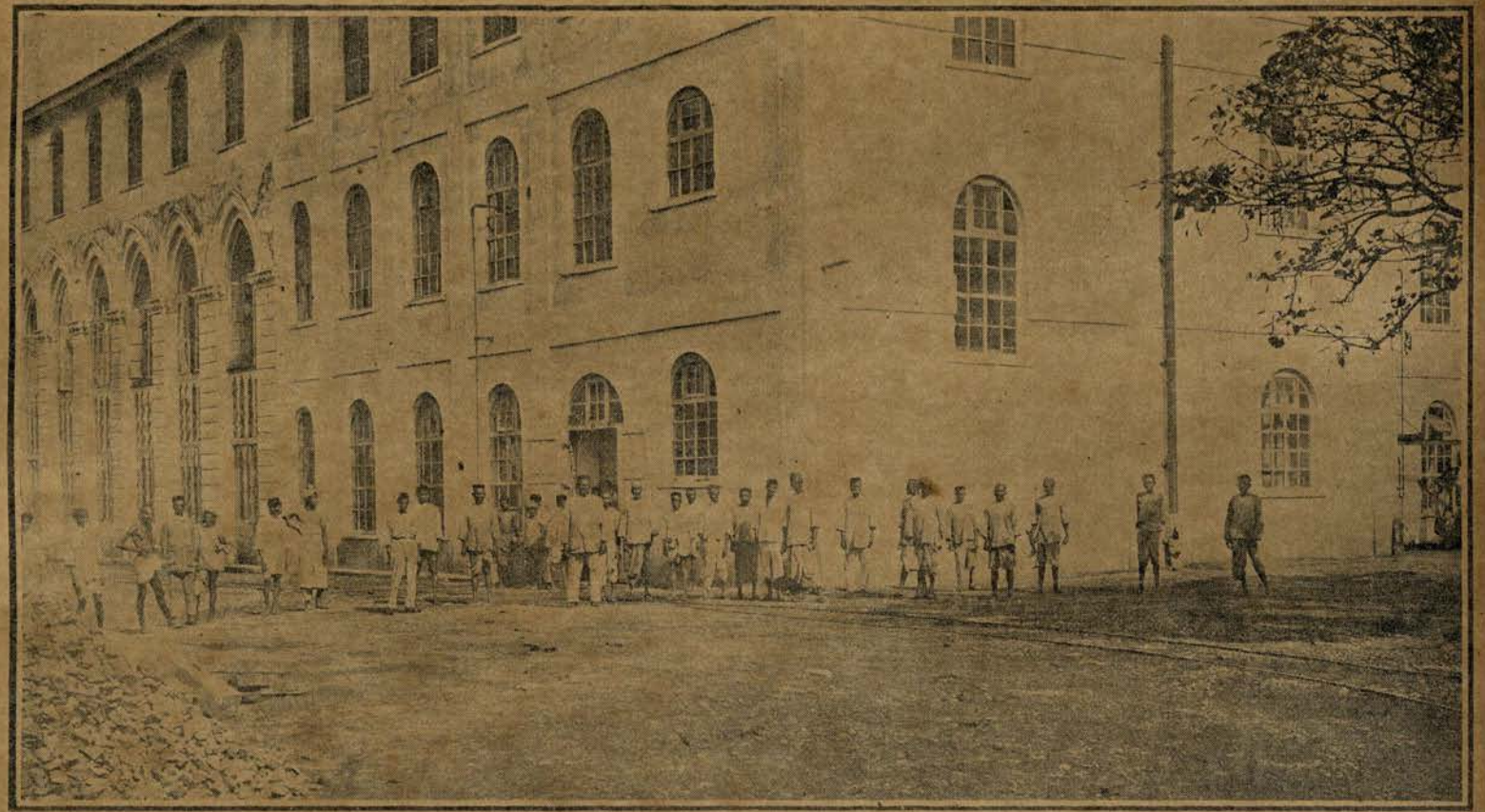
Openers and Scutchers ..	Taylor, Lang & Co. and Asa Lees & Co., Ltd.
Cards	Tweedales & Smalley, Howard & Bullough, Thomas Ashworth & Co. and Asa Lees & Co.
Drawing Frames	Tweedales & Smalley, Howard & Bullough and Asa Lees & Co.
Roving Frames	Asa Lees & Co. and Tweedales & Smalley.
Ring Frames	Asa Lees & Co., Platt Bros. & Co. and Howard & Bullough.
Mules	Asa Lees & Co. Ltd., Oldham.
Winding and Warping ..	Butterworth & Dickinson, George Keighley, Howard & Bullough and Platt Bros. & Co.
Sizing	Butterworth & Dickinson, George Keighley, Howard & Bullough and Henry Livesey.
Looms	Butterworth & Dickinson and George Keighley.
Finishing	John Downham & Co., Bury.
Humidifiers	Herbert Smethurst & Sons, Ltd., Hollinwood.
Sprinklers	Hoffman Sprinkler Co., Ltd., Manchester.
Boilers	Hick, Hargreaves & Co., Ltd., Bolton.
Electric Motors	Mather & Platt, Ltd., Manchester.

Mill driven electrically by the Tata Hydro-Electric Power Supply.



[*Architects : Messrs. Taraporewalla and Bharoccha.*

THE NEW GREAT EASTERN MILLS, 1924.



[Architects: Messrs. Taraporewalla and Bharoocha.

THE NEW GREAT EASTERN MILLS: THE NEW BLOCK—1924.

BOMBAY INDUSTRIAL MILLS CO., LTD.

Started in 1888 as LORD REAY MILLS and converted into BOMBAY INDUSTRIAL in 1909.

REGISTERED OFFICE :—12/14, CHURCHGATE STREET, FORT, BOMBAY.

Telegrams :—" BRAD," BOMBAY. Phone :—25036.

Directors :

Joseph A. Kay, M.L.C.
Mavji Govindji Sheth.
Maneklal Ujamshi
Jagjiwan Ujamshi Mulji
Douglas Moir.

Agents :
W. H. Brady & Co., Ltd.
Solicitors :
Daphtary, Ferreira and Divan.
Auditors :
A. F. Ferguson & Co.

Financial Position. (*Copyright.*)

Authorised Reduced Capital, Rs. 12,50,000 divided into 25,000 Ordinary Shares of Rs. 50 each. Issued, Rs. 9,98,750.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	19,49,825	19,97,875	19,98,750	19,98,750	19,98,750
Debenture Loan ..	5,00,000	5,00,000	5,00,000	5,00,000	5,00,000
Debt	*Nil.*	1,57,305	82,017	23,805	23,061
Reserve Fund	*Nil.*	75,000	2,00,000	2,167	2,167
Land & Buildings ..	10,24,000	10,72,369	10,74,010	10,72,369	10,22,369
Plant & Machinery ..	14,35,290	16,43,750	17,27,095	17,72,150	15,48,509
Profits	4,36,582	5,38,168	1,86,518	*Nil.*	*Nil.*
Loss	*Nil.*	*Nil.*	*Nil.*	1,97,832	5,14,529
Dividend per Share ..	10	12	5	*Nil.*	*Nil.*

Bombay Industrial Mills Co., Ltd.—*contd.*

Mill : Ferguson Road. **Phone :** 40893.

Spindles : Ring, 19,584 / Mule, 4,448 } 24,032. **Looms,** 566. **Hands,** 1,325.

Yarn Spun : 4s to 26s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1925.

	Rs.		Rs.
Cotton	20,63,957	Salaries and Wages at Mill	5,57,589
Stores	3,62,103	Agents' Remuneration and Office Allowance ..	48,000
Coal	80,596		

Mill Staff. (*Copyright.*)

Superintendent ..	J. Tinker.	Weaving Master ..	J. W. Burkett
Manager	H. B. Bilimoria.	Dyer	J. B. DeSouza.
Carding Master / Spinning Master }	None.	Mechanical Engineer	Balkrishna Parshottam.
		Electrical Engineer.	J. W. Cheetham.

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers. .	Asa Lees & Co. and Brooks & Doxey.
Cards	Asa Lees & Co., and Ashworth Bros.
Draw Frames	Howard & Bullough and Brooks and Doxey.
Roving Frames	Howard & Bullough, Asa Lees and Co and Tweedales & Smalley.
Ring Frames	Brooks & Doxey and Asa Lees & Co.
Mules	Asa Lees & Co.
Winding and Warping / Sizing .. .. .. / Looms	Butterworth & Dickinson and William Dickinson.
Finishing	William Dickinson.
Humidifiers	Ardeshir Wadia & Co.
Sprinklers	Mather & Platt.
Steam Engine	J. & E. Wood.
Boilers	Galloways, Ltd.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

KOHINOOR MILLS CO., LTD.

(MILLS, 1 and 2.)

KOHINOOR No. 1 started in 1896. KOHINOOR No. 2 was started in 1888, as the UNION MILLS and became NAIGAUM in 1904, and KOHINOOR No. 2 in 1913.

REGISTERED OFFICE :—HOME STREET, FORT, BOMBAY.

Telegrams : " KILLICK, BOMBAY." Phone : 25127.

Directors :

F. C. Annesley.
Sir Sassoon David, Bart., K.C.S.I.
H. A. H. Payne.
Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E.
Ramdas Narandas.
D. W. Wilson, C.I.E.
Mafatlal Gagalbhai.
Shantidas Askuran.

Agents :

Killick, Nixon & Co.

Auditors :

A. F. Ferguson & Co.

Solicitors :

Payne & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 20,00,000 divided into 4,000 Ordinary Shares of Rs. 500 each. Issued, Rs. 20,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	19,99,500	20,00,000	20,00,000	20,00,000	20,00,000
Debenture	10,00,000	10,00,000	10,00,000	10,00,000	10,00,000
Debt Loans	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Reserve Funds	16,85,000	20,35,000	24,35,000	27,35,000	26,79,210
Land & Building ..	16,99,553	18,75,875	24,83,124	29,41,676	30,23,476
Plant & Machinery ..	15,89,180	17,68,770 58,794	17,22,340 2,78,852	20,23,569	20,28,556
Loss	*Nil.*	*Nil.*	*Nil.*	1,37,161	*Nil.*
Profits	27,45,645	22,07,401	14,12,624	*Nil.*	90,306
Dividend Per Share ..	600	400	170	*Nil.*	*Nil.*

Kohinoor Mills Co., Ltd.—*contd.*

Mill : Dadar. **Phone :** 40956.

Spindles : Ring, 48,808 / Mule, 20,188 } 68,996. **Looms,** 1,394. **Hands,** 3,250.

Yarn Spun : 3s, 12s & 14½s. **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	43,32,621	Salaries and Wages ..	11,33,350
Stores	4,13,174	Agents' Remuneration ..	12,000
Coal, Liquid Fuel and Electric Energy ..	2,73,528	Interest and Debenture Interest	2,49,345

Mill Staff. (*Copyright.*)

Manager	Ramsingh Dongarsingh.	Finisher	Lalji Topan.
Carding Masters	J. Sutton. / B. Pastakia.	Dyer	Framrose Cursetji.
Spinning Master ..	J. A. Sutton.	Mechanical and Electrical Engineer	M. D. Shroff.
Weaving Master and Asstt. Manager	J. Astley.		

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers ..	Platt Bros & Co.
Cards	Do. and Howard & Bullough.
Drawing Frames	Do.
Roving Frames	Do. and Howard & Bullough.
Ring Frames .. / Mules	Do. and Asa Lees & Co.
Winding and Warping ..	Wm. Dickinson & Sons.
Sizing	Willan & Mills, Wm. Dickinson and Howard & Bullough.
Looms	Wm. Dickinson & Sons.
Bleaching	Mather & Platt.
Finishing	Do. and J. H. Riley.
Dyeing	(Country-made.)
Humidifiers	Mather & Platt.
Sprinklers	Do. and Witter & Son.
Boilers	Yates & Thom.
Electric Motors	Westinghouse Electric Co. and British Thomson-Houston Co.

No. 1 Mill driven electrically by the Tata Hydro-Electric Power Supply
No. 2 „ „ „ „ Andhra Valley „ „

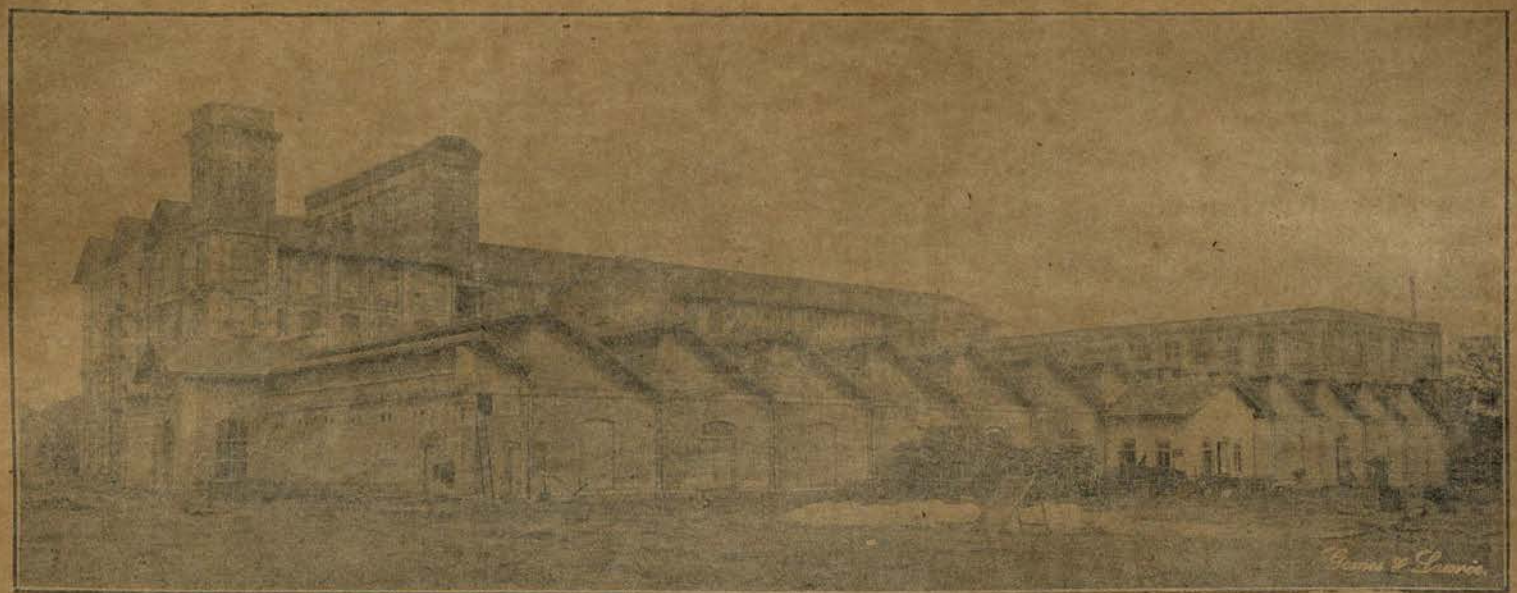
Some Popular Mill Labels.

[Copyright.

THE SWADESHI MILLS.

THE STANDARD MILLS.

THE KOHINOOR MILLS.



[*Architects : Messrs. Gosling and Morris.*

THE FINLAY MILLS, BOMBAY : THE FIRST SUCCESSFUL ELECTRICALLY DRIVEN SPINNING AND WEAVING MILL IN INDIA.

The Finlay Mills were the first in India in 1907 to be designed and laid out entirely for the electric drive with its own Generators.

FINLAY MILLS, LTD.

Started in 1907.

REGISTERED OFFICE :—ESPLANADE ROAD, FORT, BOMBAY.

Telegrams : "MERCATOR." Phone : 26547 / 26549

Directors :
A. Geddis.
B. Brown.
Sir Sassoon David, Bart.
G. E. D. Langley.
Hon. Lalji Naranji.
F. E. Dinshaw.
G. Furze (*ex-officio*).

Agents :
James Finlay & Co., Ltd.

Auditors :
A. F. Ferguson & Co.

Solicitors :
Crawford Bayley & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 20,00,000 divided into 8,000 Ordinary Shares of Rs. 250 each. Issued Capital, Rs. 20,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	20,00,000	20,00,000	20,00,000	20,00,000	20,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	2,09,505	1,43,600	*Nil.*	72,060	*Nil.*
Reserve Fund	11,25,000	16,36,000	19,00,000	19,00,000	19,00,000
Other Funds	3,75,000	3,75,000	4,25,000	5,25,000	5,25,000
Land & Building ..	8,07,562	9,02,577	9,44,577	9,27,077	9,07,156
Plant & Machinery ..	9,38,453	8,49,000	8,12,017	7,33,900	6,16,947
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	26,27,923	18,13,070	14,94,581	8,67,041	3,06,804
Dividend per Share ..	200	150	105	65	20

Finlay Mills Ltd.—*contd.*

Mill : Parel (Lal Baug). **Phone :** 41070.

...les : Ring, 46,072. **Looms,** 812. **Hands,** 2,124.

Yarn Spun : 6*s* to 32*s*. **Cloth :** Grey and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
...otton .. ...ores .. ...oal .. ...lectric Energy	.. 45,33,959	Salaries and Wages at Mill and Office	9,31,465
		Agents' Remuneration ..	36,000
		Interest	24,745

Mill Staff. (*Copyright.*)

Managers ..	W. Taylor. W. L. Shaw.	Weaving Master ..	J. Parker.
Carding and Spinning Master	M. P. Nadkarni.	Mechanical and Electrical Engineer	H. C. Gantzer.

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers ..	Tweedales & Smalley and Lord Bros.
Cards .. Drawing Frames Roving Frames Ring Frames ..	Tweedales & Smalley.
Winding and Warping ..	William Dickinson & Sons and Thomas Holt, Ld.
Sizing Looms	William Dickinson & Sons.
Humidifiers	Mather & Platt, Ltd., Manchester.
Sprinklers	Hoffmann Sprinkler Co., Ltd., Manchester.
Boilers	Thomas Beeley & Sons, Hyde.
Electric Motors	British Westinghouse and Metropolitan-Vickers.

Mills now driven electrically by the Tata Hydro-Electric and the Andhra Valley Power Supply.

SWAN MILLS, LTD.

Started as BOMBAY NATIONAL in 1888. Reconstructed as SWAN MILLS in

REGISTERED OFFICE :—ESPLANADE ROAD, FORT, BOMBAY.

Telegrams : "MERCATOR," Bombay. Phone : 2 20

Directors :
A. Geddis.
B. Brown.
Sir Sassoon David, Bart.
G. E. D. Langley.
Hon. Laljee Naranji.
F. E. Dinshaw.
G. Furze (*ex-officio*).

Agents :
James Finlay & Co., Ltd.

Auditors :
A. F. Ferguson & Co.

Solicitors :
Crawford Bayley & Co.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 10,00,000 divided into 4,000 Ordinary Shares of Rs. 250 each. Issued, Rs. 10,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	10,00,000	10,00,000	10,00,000	10,00,000	10,00,000
Debenture	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Debt Loans	97,210	68,210	2,110	5,82,020	*Nil.*
Reserve Funds	8,50,000	12,33,000	14,00,000	14,00,000	14,00,000
Other Funds	2,25,000	2,25,000	3,25,000	3,75,000	3,75,000
Land & Building ...	3,42,000	4,33,845	4,74,809	4,61,933	4,49,785
Plant & Machinery ..	4,00,067	3,65,000	4,86,101	4,56,700	4,15,835
Loss	*Nil.*	*Nil.*	*Nil.*	*Nil.*	*Nil.*
Profits	13,45,270	14,80,052	11,37,543	5,74,660	2,84,035
Dividend per Share ..	170	200	150	100	50

Swan Mills, Ltd.—*contd.*

Mill : Sewree. **Phone :** 40834.

Spindles : Ring, 23,036 ; Mule, 8,580 } 31,616. **Looms,** 600. **Hands,** 1,439.

Yarn Spun : 12*s* to 32*s*. **Cloth :** Grey and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton, Stores, Coal, etc. ..	28,21,560	Salaries and Wages at Mill and Office	6,04,577
		Agents' Remuneration ..	31,559
		Interest	28,263

Mill Staff. (*Copyright.*)

Managers	W. Taylor. W. L. Shaw.	Mechanical and Electrical Engineer ..	G. M. Kothare.
Carding and Spinning Master ..	G. Robinson.		

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers ..	Platt Bros. & Co. and Asa Lees & Co.
Cards	Platt Bros. and Tweedales & Smalley.
Drawing Frames, Roving Frames ..	Do. Do. and Asa Lees.
Ring Frames	Tweedale & Smalley and Platt Bros.
Mules	Asa Lees & Co., Ltd.
Winding and Warping ..	Platt Bros., Thomas Holt, and Wm. Dickinson.
Sizing	Do. and William Dickinson.
Looms	Platt Bros. & Co., Ltd.
Humidifiers, Sprinklers	Mather & Platt, Ltd.
Boilers	Penman & Co. and John Musgrave & Sons, Ltd.
Electric Motors	Westinghouse.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

GOLD MOHUR MILLS, LTD.

Started in 1896.

Agency transferred in September 1924 from ALLEN BROS & Co. (India) LD. to JAMES FINLAY & Co., LD.

REGISTERED OFFICE :—ESPLANADE ROAD, FORT, BOMBAY.

Telegrams : " MERCATOR," BOMBAY. Phone : 26547 26548

Directors :

B. Brown.
A. Geddis.
Sir Sassoon David, Bart.
G. E. D. Langley.
Hon. Lalji Naranji.
F. E. Dinshaw.
G. Furze (*ex-officio*).

Agents :

James Finlay & Co., Ltd.
(From 15-9-24)

Auditors :

A. F. Ferguson & Co.
Ratansha S. Bharucha.

Financial Position. (*Copyright.*)

Authorised Capital, Rs. 34,00,000 divided into 1,200 Non-cumulative Preference Shares of Rs. 250 each and 30,000 Ordinary Shares of Rs. 100 each and 400 B. Ordinary Shares of Rs. 250 each.

Issued, 1,200 Non-cumulative Preference Shares of Rs. 250 each, Rs. 3,00,000 and 27,604 Ordinary Shares of Rs. 100 each, Rs. 27,60,400=Rs. 30,60,400.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	17,64,000	17,64,000	19,84,950	27,62,450	30,62,450
Debenture	6,00,000	6,00,000	6,00,000	6,00,000	30,00,000
Debt Loans	43,216	13,20,135	19,96,138	37,40,991	18,61,397
Reserve Funds.	2,90,000	4,10,000	6,00,000	6,00,000	6,00,000
Other Funds	98,000	1,33,000	1,43,000	1,43,000	1,43,000
Land & Building ..	8,65,455	17,02,722	19,86,459	20,32,947	20,39,012
Plant & Machinery ..	7,35,272	14,73,548	35,63,582	41,08,229	42,83,640
Loss	*Nil.*	*Nil.*	*Nil.*	4,00,921	7,81,536
Profits	12,25,586	8,76,458	2,75,490	*Nil.*	*Nil.*
Dividend per Share ..	*	†	‡	*Nil.*	*Nil.*

*Rs 50 per share on 7,460 fully paid up shares and Rs. 22-14-8 per share on 20,000 partly paid-up shares.

‡ Rs. 25 per share on 7,640 fully paid-up shares and Rs. 12-8 per share on 20,000 partly-paid-up shares.

† Rs. 8 per share on 7,640 fully paid-up shares and Rs. 4 per share on 20,000 partly paid-up shares.

Gold Mohur Mills, Ltd.—*contd.*

Mill : Old Dadar Road. **Phone :** 40903.

Spindles : Ring, 42,472. **Looms,** 1,040. **Hands,** 2,533.

Yarn Spun : 6*s* to 32*s*. **Cloth :** Grey and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	30,59,456	Salaries and Wages ..	8,02,374
Stores	2,77,191		
Bleaching and Dyeing charges	80,287	Agents' Remuneration ..	27,333
Coal	99,460		
Electrical Energy	66,677	Interest	3,38,677

Mill Staff. (*Copyright.*)

Manager	T. Woods.	Weaving Master ..	J. V. Dave.
Carding and Spinning Master	J. F. Allenson.	Mechanical and Electrical Engineer	M. H. Bhaba.

Plant & Machinery. Suppliers. (*Copyright.*)

Openers and Scutchers, Cards .. .., Drawing Frames .., Roving Frames .., Ring Frames ..	Howard & Bullough and Tweedales & Smalley.
Winding and Warping, Sizing .. .., Looms	Platt Bros. & Co., Ltd., Oldham.
Finishing	John Downham & Co.
Dyeing (Jiggers)	S. R. Gebauer.
Humidifiers	Mather & Platt and Herbert Smethurst & Sons, Ltd.
Sprinklers	Mather & Platt and Hoffman Sprinkler Co.
Boilers	Galloways, Ltd.
Electric Motors	British Westinghouse & Electric Co., Mather & Platt and Metropolitan-Vickers, Ltd.

Mill driven electrically by the Tata Hydro-Electric and the Andhra Valley Power Supply.

SIMPLEX MILLS CO., LTD.

Started in 1915.

REGISTERED OFFICE :—CANADA BUILDING, FORT, BOMBAY.

Telegrams : " SIMPLEYORN," BOMBAY. Phone : 26531 / 26532

Directors :

Hon. Sir Pheroze Sethna, O.B.E.
F. E. Dinshaw.
F. R. Wadia.
D. M. Wadia.
P. Gulraj Singhani.
Ratansi D. Morarji.
T. V. Baddeley.
C. J. Meager.

Agents :

Allen Bros. & Co. (India), Ltd.

Auditors :

S. B. Billimoria & Co.

Solicitors :

Payne & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 22,50,000 divided into 9,000 Ordinary Shares of Rs. 250 each. Issued, Rs. 22,50,000.

	1921.	1922.	1923.	1924.	1925.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital	22,50,000	22,50,000	22,50,000	22,50,000	22,50,000
Debentures	10,00,000	10,00,000	10,00,000	10,00,000	10,00,000
Debt	24,50,000	22,50,000	31,62,746	24,50,000	20,74,960
Reserve Funds ..	1,03,144	1,22,221	6,20,000	6,20,020	6,20,000
Land and Building ..	17,99,104	18,90,131	19,43,671	19,50,932	19,52,158
Plant and Machinery ..	34,40,357	37,16,173	40,82,078	41,57,092	42,16,791
Loss	*Nil.*	*Nil.*	*Nil.*	93,173	*Nil.*
Profits	13,54,047	16,61,645	3,62,975	*Nil*	1,28,589
Dividend	35	110	15	*Nil.*	*Nil.*

Simplex Mills Co., Ltd.—*contd.*

Mill : Clerk Road, Byculla. **Phone :** 40617.

Spindles : Ring, 37,208. **Looms,** 1,230. **Hands,** 2,885.

Yarn Spun : **Cloth :** Grey, Bleached and Coloured.

Principal Items of Expenditure for year ended 31st March, 1925.

	Rs.		Rs.
Cotton	38,04,598	Wages at Mill	10,78,533
Dyeing and Bleaching ..	2,87,977	Mill and Office Establishment and Allowance ..	1,03,862
Stores .. .. / Coal and Liquid Fuel.	4,76,235	Agents' Remuneration ..	18,369
Electric Energy	1,52,298	Interest	1,55,186
Yarn	29,466		

Mill Staff. (*Copyright.*)

Manager	A. N. Adajania.
Carding Master ..	J. H. Shroff.
Spinning Master ..	R. C. Kurma.
Weaving Master ..	A. N. Adajania.
Finisher and Dyer	C. J. Sharma.
Mechanical Engineer ..	B. H. Mistry.
Electrical Engineer ..	C. N. Adajania.

Plant & Machinery. — Suppliers. (*Copyright.*)

Openers and Scutchers ..	Tweedale & Smalley, Ltd.
Cards	Do. and Howard & Bullough.
Drawing Frames / Roving Frames / Ring Frames ..	Tweedale & Smalley, Ltd.
Mules	Platt Brothers & Co., Ltd.
Winding and Warping ..	Henry Livesey, Hacking & Co., Howard & Bullough, Platt Bros., and Wm. Dickinson & Sons.
Sizing	Henry Livesey, Hacking & Co., Howard & Bullough, Platt Bros., Wm. Dickinson and George Keighley.
Looms	Hacking & Co., Atherton Bros., Willan & Mills and Gregson & Monk.
Finishing	Mather & Platt and John Downham & Co.
Humidifiers	The Textile Illuminating Engineering Co., Ltd.
Sprinklers	Mather & Platt, Ltd.
Boilers	Babcock & Wilcox, Ltd.

Mills driven electrically by the Tata Hydro-Electric Power Supply.

GLOBE MANUFACTURING CO., LTD.

Started in 1896.

REGISTERED OFFICE :—16, BANK STREET, FORT, BOMBAY.

Telegrams : "MORRISONS," BOMBAY. Phone : 26561.

Directors :
T. E. Cunningham.
Sir Jamsetjee Jejeebhoy, Bart., K.C.S.I.
Hon. Sir Phiroze Sethna, O.B.E.
J. R. Abercrombie, M.C.
N. B. Macbeth.
A. S. Gillespie.

Agents :
Turner Morrison & Co., Ltd.
Solicitors :
Little & Co.
Auditors:
A. F. Ferguson & Co.

Financial Position. *(Copyright.)*

Authorised Capital, Rs. 10,00,000 divided into 10,000 Ordinary Shares of Rs. 100 each. Issued Rs. 10,00,000.

	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paid-up Capital ..	10,00,000	10,00,000	10,00,000	10,00,000	10,00,000
Debenture	10,00,000	10,00,000	10,00,000	10,00,000	10,00,000
Debit Loans	6,03,268	6,83,165	18,94,794	20,22,070	16,14,329
Reserve Fund	10,00,000	8,00,000	13,00,725	11,75,725	10,91,114
Land & Buildings ..	5,17,970	6,81,000	10,28,070	10,12,590	9,89,970
Plant & Machinery ..	9,08470	9,70,595	18,17,210	18,68,838	18,09,500
Profits..	10,15,240	7,53,759	1,34,974	*Nil.*	*Nil.*
Loss	*Nil.*	*Nil.*	*Nil.*	1,62,704	3,92,695
Dividend per Share ..	30	30	10	*Nil.*	*Nil.*

Globe Manufacturing Co., Ltd.—*contd.*

Mill : DeLisle Road. **Phone :** 40915.

Spindles : Ring, 28,096 / Mule, 1,008 } 29,104. **Looms,** 744. **Hands,** 1,765.

Yarn Spun : 6½s to 30s. **Cloth :** Grey and Coloured.

Principal Items of Expenditure for year ended 31st December, 1924.

	Rs.		Rs.
Cotton	24,76,305	Salaries and Wages at Mill ..	6,56,428
Stores	3,31,320	Office Establishment and Allowance	37,330
Coal and Liquid Fuel ..	28,698	Agents' Remuneration ..	*Nil.*
Electric Energy	1,05,968	Interest	1,91,593

Mill Staff. (*Copyright.*)

Manager	Norman May.	Finisher, Dyer	D.S. Karandikar.
Carding Master.	S. D. Todivalla.	Mechanical and Electrical Engineer.	E. F. Elavia.
Spinning Master	A. B Vanjaree.		
Weaving Master	W. Warrington.		

Plant & Machinery.	Suppliers. (*Copyright.*)
Openers and Scutchers ..	Asa Lees & Co. and Platt Bros. & Co.
Cards	Ashworth Bros. and Tweedales & Smalley.
Draw Frames, Roving Frames ..	Brooks & Doxey and Tweedales & Smalley.
Ring Frames	Brooks & Doxey and Howard & Bullough
Mules	Asa Lees & Co., Ltd., Oldham.
Winding and Warping, Sizing .. .. , Looms	Butterworth & Dickinson, Burnley.
Bleaching, Finishing, Dyeing	Sir James Farmer and Norton & Co., Ltd.
Humidifiers, Sprinklers	Mather & Platt, Ltd.
Boilers	John Musgrave & Sons.
Electric Motors	Metropolitan-Vickers Electric Co.

Mill driven electrically by the Tata Hydro-Electric Power Supply.

THE LATE MR. VURJEEVANDAS MADHOWDAS.

THE LATE MR. N. M. WADIA, C.I.E.

THE LATE MR. K. R. CAMA.

THE LATE MR. THACKERSEY MOOLJI.

Cotton Mill Directors : Past and Present.

In the early days of the mill industry in Bombay an average-sized mill could be started for Rs. 15,00,000 including land, building and machinery. While this capital would be paid cash down by a single millowner of the present day, the co-operation of financing directors was necessary in the old days, especially after the reverses experienced by Bombay citizens during the share mania period. The Parsi pioneers of the industry managed to float their concerns mainly with the help of members of their own community who formed the Directorate and the Bhatia merchants who followed them adopted more or less the same procedure. At the same time the limited number of Englishmen who were interested in the imports of Manchester goods and the export of cotton from Bombay also took part in mill building which promised to bring wealth to the city. Thus the very first Joint Stock concern, *viz.*, the Oriental Mill Company which was projected soon after the starting of the pioneer factory by Mr. Cawosji Daver, had a mixed and representative Board of Directors consisting of Messrs. W. Hunter, Byranjee Jeejeebhoy, Varjivandas Madhowdas, P. Scoval, Ardeshir Dady, Cursetji Cama and Elias David Sassoon whose firm now controls the largest spinning and weaving power in the country. There was another group of enterprising citizens who acted as directors of cotton mills between 1865-70 and included Messrs. Morarji Goculdas, Khatau Makanji, Haji Ismail Haji Habib, Lakhmidas Khimji, Jadhowji Shamji, Cumroodin Tyabji and Dwarkadas Vasonji.

Nomination of Directors.

The Agency system of mill management has been peculiar to Bombay and so has been the nomination of directors. The Indian Companies Act contemplates the election of directors in order to control the actions of the Agents and to look after the interests of the general body of shareholders. The mill companies which were projected during the profitable years following on the crisis of 1865 were financed almost wholly by the promoters who became the Agents and Directors and the latter were re-elected at the annual general meetings which showed the superior influence of the Agents or their holding in their own rights a substantial, if not the largest number of shares in the capital of the company. This system has no doubt proved detrimental to the minority investors in the hands of incompetent and unscrupulous Agents, but in well-managed concerns where the Agents and Directors were the principal shareholders, the preponderance of the "family" Board was an advantage. Mill investors are prone to kick against calls and there have been instances when they have turned against the management during trade depression without adequate reason and through personal spite against the Agents whom they tried to embarrass by unpleasant and irrelevant questions at the general meetings. The strong hand of the Directors and the voting influence of the Agents could alone

THE LATE MR. NANABHOY BYRAMJI JEEJEEBHOY.

THE LATE MR. RUSTOMJI N. B. JEEJEEBHOY.

THE LATE MR. BURJORJI RUSTOMJI MODY

THE LATE MR. DORABJI FRAMJI PANDAY.

THE LATE MR. HORMASJI NOWROJI SAKLATVALA.

save the reputation of a concern in such cases. The Maneckji Petit Mills and other companies which followed the Oriental Mill have almost invariably been under the control of the Agency Directors or Directors selected by the Agents from their friends and relatives and even at the present day at least half the total number of directors, if not more in the cotton mills of Bombay, are directly or indirectly connected with the Agency firms or have a share in the Agency commission.

Prominent Citizens as Directors.

That the position of the Directors was one of great responsibility has been realized by the most prominent of citizens who were not otherwise connected with the trades and industries of Bombay, but accepted office on the Board of several important mill companies. Sir Phirozeshaw Mehta, Sir Ibrahim Rahimtoola, the Hon'ble Mr. C. H. Armstrong, Sir Chunilal Mehta, Mr. R. W. Dunlop, C.I.E., Sir Chimanlal Setalvad, Sir Jamsetji Jeejeebhoy (Fourth Baronet), Mr. Sorabji Bengali, C.I.E., and other well-known citizens enjoyed the confidence of investors as directors of cotton mill companies.

It will also be instructive to recall below the names of other directors who were connected with the mills in former years and during the pre-war period and whose names are not mentioned in the present volume under the heading of Mill Promoters, Agents, or Directors,—

H. Maxwell.
Liladhar Shamji.
Sorabji F. Patel.
Jerajbhoy Makanji.
Byramji N. Seervai.
Karsondas Vullabhdas.
Premchand Roychand.
Silias Sassoon.
J. P. Crystal.
H. R. Dunk.
Dossabhoy R. Colah.
J. A. Grant.
N. S. Glazebrook.
R. Kennedy.
Hugh L. Symons.
Edulji N. Sethna.
Anandji Nanji.
Rao Bahadur K. N. Sailor.
Sir Vasanji Tricumji.
Sir Jagmohandas Varjivandas.
P. Pearson.
Maneckji C. Sethna.
Dorabji C. Shroff.
Dharamsey Morarji Goculdas.
Narandas Thackersey.
J. A. Forbes.
James McDonald.
Valubhdas Valji.
Malcolm N. Hogg.
Cursetji F. Parekh.
Goculdas Naranji.
Hormusji S. Bathivalla.
Sir Harkisondas Narotamdas.
Jamsedji F. Patel.
E. R. Khote.
S. D. Khote.
Limji Maneckji Banaji.
Dr. A. P. Cama.
R. C. Wadia.
Gordhandas Khatau.
Dhunjibhoy M. Jeejeebhoy.
Nasserwanji Dadyseth.
Sir Hormusji Wadia (Bar-at-law).
Dadabhoy B. Jeejeebhoy.
Dharamsey Soonderdas.
Hajibhoy Laljee.
Gordhundas Soonderdas.

THE LATE MR. CHARLES NISSIM.

THE LATE MR. MUNCHERJI N. BANAJI.

THE LATE MR. N. J. GAMUDIA.

THE LATE SIR ADAMJEE PEERBHOY, KT.

Cotton Mill Directors in 1925.

THE constitution of Directors of cotton mills since 1920 has undergone a change compared with the pre-war period. The transfer of agencies and the voluntary sale of several concerns during the boom years 1920-22 have necessarily brought about the retirement of the old directors whose place has been taken by the friends and representatives of the newly appointed Agents. Thus while the 64 joint stock mill companies now working in Bombay are being managed by 41 agency firms they are under the supervision of 175 directors including the directors *ex-officio*. These 175 citizens have not only the control of a paid-up capital of Rs. 19,66,50,000 in the aggregate, but are responsible for the efficient management of concerns which support 150,000 workpeople and their dependents in addition to hundreds of the mill and office staff and the lawyers, doctors, engineers, architects, merchants and others who are dependent on the mill industry. A study of the proportionate communal strength and the professional qualifications and general status of the directors should therefore prove instructive in the form in which they are presented in these pages.

"Agency Directors" in the following groups include partners and others connected with the agency firms, while the "Outside Directors" are those who have no interest in the agency but take an active interest in the concern as large investors or are elected by the Agents and shareholders.

Number of Directors According to Communities.

	Agency Directors.	*Outside Directors.*	*Total.*
Parsi Directors	23	26	49
Hindu ,, ...	42	35	77
Mahomedan ,, ...	12	7	19
Jew ,, ...	5	1	6
European ,, ...	13	11	24
	95	80	175

Of these 175 directors 149 belong to the merchant class, 11 have received technical training and 15 are lawyers while more than half are Agency Directors.

The number of directors in each concern averages from 5 to 6 including the directors *ex-officio*. The New Kaiser-i-Hind Mill has, however, 10 and the Jam Mill 8 directors on their Boards. While Parsi, Hindu, Mahomedan, Jew and European directors are to be found

on the Board of several concerns, not a single Mahomedan appears in the companies under European management and no European is found on any of the Mahomedan mill companies as will be seen from the following details :—

Distribution of Directors among the various Mill Companies.

		Mill Companies.					
		Parsi.	*Hindu.*	*Mahomedan.*	*Jewish.*	*European.*	*Total Co.'s*
49 Parsi	Directors look after ..	16	7	12	8	8	51
77 Hindu	,, ,, ,, ..	9	18	3	7	8	45
19 Mahomedan	,, ,, ,, ..	2	3	12	5	*Nil.*	22
6 Jew	,, ,, ,, ..	3	5	8	7	4	27
24 European	,, ,, ,, ..	3	1	*Nil.*	4	10	18
175							

Proportion of Mill Companies looked after by each Community.

49 Parsi	Directors look after	16 Parsi	companies and	35	other	companies	=51
77 Hindu	,, ,, ,,	18 Hindu	,, ,,	27	,,	,,	=45
19 Mahomedan	,, ,, ,,	12 Mahomedan	,, ,,	10	,,	,,	=22
6 Jew	,, ,, ,,	7 Jew	,, ,,	20	,,	,,	=27
24 European	,, ,, ,,	10 European	,, ,,	8	,,	,,	=18
175							

Financial Risks and Responsibilities of Directors.

The number of mills and the paid-up capital shown against each of the 175 directors in the following pages reveal instructive information as to the financial interest in cotton mill investment by the members of the various communities in Bombay. While the partners in the large agency firms like the Currimbhoys and E. D. Sassoon necessarily represent their own concerns on the Board there are directors without any agency interest whose total of the paid-up capital and the number of mills exceed those of the mill agents or agency directors. Thus Sir Fazulbhoy Currimbhoy represents as director a dozen mills with a total of Rs. 8,73,54,000 in paid-up capital including 2 of the E. D. Sassoon mills representing Rs. 6,24,00,000. Sir Victor Sassoon, Baronet, has half a dozen concerns which are all under his firm's agency aggregating Rs. 7,26,00,000, while Mr. F. E. Dinshaw, one of the best known of Bombay attorneys, represents 30 mill companies with a total of Rs. 12,81,57,000 in paid-up capital including the four or five concerns in which he has an agency interest. Among the other directors who have no agency partnership, the Hon'ble Mr. Phiroze C. Sethna sits on the Board of 2 concerns with an aggregate of Rs. 3,53,98,380 in capital ; Sir Jamsetji Jeejeebhoy, Baronet, also an "outside" director, represents 13 mill com-

panies with Rs. 2,71,19,380 as capital, while Mr. Jamsetji A. Wadia, an "agency director," controls 8 mills with an aggregate of Rs. 1,67,79,880 in paid-up capital. Mr. N. B. Saklatvala, C.I.E., is director of two other concerns besides the three mills under Messrs. Tata's agency, the total of the paid-up capital amounting to Rs. 1,78,11,600. Mr. Narotam Morarji is director of 5 companies including the Morarji Mill, the total paid-up capital being Rs. 7,14,87,100 of which Rs. 6,00,00,000 is represented by the Sassoon United Mills. Sir Sassoon David, Baronet, sits on the Board of 14 concerns including the Dawn Mill under his agency, the aggregate of the paid-up capital being Rs. 2,74,42,330. Mr. Ambalal Sarabhai represents 4 concerns with a total of Rs. 1,31,68,440 in capital and the Hon'ble Mr. Lallubhai Samaldas, C.I.E., is director of 3 mills with Rs. 1,17,20,540 as capital.

Professional Qualifications of Directors.

Although the cotton industry in Bombay has been firmly established for nearly half a century and the mills have advanced with the times in point of machinery and processes, the technical training of the millowners and directors has been limited. The following list of 175 mill agents and directors for 1925 include only 11 citizens who are practical mill managers or engineers. Of this small number, 9 belong to the Parsi community and 2 are Europeans—one a mechanical engineer and the other a qualified chemist and dyer.

	Merchants.	*Technical.*	*Lawyers.*	*Total.*
Parsi Directors—				
Agency Directors	13	7	3	27
Outside ,, ...	17	2	7	22
	30	9	10	49
Hindu Directors—				
Agency Directors	42	0	0	42
Outside ,, ...	32	0	3	35
	74	0	3	77
Mahomedan Directors—				
Agency Directors	13	0	0	13
Outside ,, ...	6	0	0	6
	19	0	0	19
Jew Directors—				
Agency Directors	5	0	0	5
Outside ,, ...	1	0	0	1
	6	0	0	6
European Directors—				
Agency Directors	13	0	0	13
Outside ,, ...	7	2	2	11
	20	2	2	24

[From an Oil Painting by Mr. M. F. Pithavala.

THE LATE SIR SHAPURJI B. BROACHA, Kt.

"Like most of our practical patriots and benefactors, Sir Shapurji had not received any University training, and never entered politics. He contributed largely towards India's industrial development and her indigenous resources by his commercial enterprise and financial assistance.

Sir Shapurji Broacha is dead; his familiar figure, clad in the white simplicity he loved, has gone for ever from the steps of the banks and the stock exchange, from the boards of joint stock companies, and the wards and corridors of hospitals and dispensaries; his kindly presence will be missed by hundreds of widows and orphans who will mourn his loss with thousands of the poor of this Presidency whom he delighted to serve to the end of a good and glorious life." — *Indian Textile Journal.*

Parsi Directors—with Technical Training.

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
C. D. Panday	Crown	8,00,000	968	41,768
N. N. Wadia, C.I.E..	Bombay Dyeing * ..			
	Spring *	62,74,500	4,810	180,296
	Textile *			
D. F. Batliwala ..	Bombay Dyeing * ..			
	Spring *	62,74,500	4,810	180,296
	Textile *			
Bomanjee Aderjee ..	Bombay Dyeing * ..			
	Spring *	62,74,500	4,810	180,296
	Textile *			
C. N. Wadia, C.I.E...	Century *	18,50,000	2,996	104,680
N. P. Whaddia ..	Edward Sassoon ..	17,00,000	868	45,408
	Meyer Sassoon ..	10,00,000	1,012	42,312
	Moon *	2,50,000	756	38,494
		29,50,000	2,636	126,214
C. P. Wadia	Moon *	2,50,000	756	38,494
S. D. Saklatvala ..	Standard *	12,00,000	1,179	44,536
	Swadeshi *	20,00,000	2,729	104,212
	(No. 2 Bom. United.)*	64,87,100	1,800	63,248
	Tata *	96,87,100	5,708	211,996
D. M. Wadia	Simplex	22,50,000	1,230	37,208

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

Parsi Directors—Mill Agents and Merchants.

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
Sir D. J. Tata, Kt., K.C.I.E.	Standard *	12,00,000	1,179	44,536
	Swadeshi * 1 & 2 ..	20,00,000	2,729	104,212
	Tata *	64,87,100	1,800	63,248
		96,87,100	5,708	211,996
R. D. Tata	Standard *	12,00,000	1,179	44,536
	Swadeshi * 1 & 2 ..	20,00,000	2,729	104,212
	Tata *	64,87,100	1,800	63,248
		96,87,100	5,708	211,996
N. B. Saklatvala, C.I.E	Bombay Dyeing ..	62,74,500	4,810	180,296
	Century	18,50,000	2,996	104,680
	Standard *	12,00,000	1,179	44,536
	Swadeshi * 1 & 2 ..	20,00,000	2,729	104,212
	Tata *	64,87,100	1,800	63,248
		1,78,11,600	13,514	496,972
B. F. Madon	Swadeshi 1 & 2 ..	20,00,000	2,729	104,212
Jamsetji Ardesheer Wadia.	Bradbury	24,85,000	662	35,884
	Crescent	15,00,000	1,054	44,688
	Fazulbhoy * ..	18,00,000	1,268	52,256
	Madhorao Scindia ..	38,00,000	604	44,320
	Mathradas	24,00,000	907	43,596
	Phœnix	8,00,000	696	52,500
	Pearl	19,97,000	1,760	49,356
	Premier	19,97,880	472	15,260
		1,67,79,880	7,423	337,860
Ardasheer Jamsetji A. Wadia.	Bradbury	24,85,000	662	35,884
	Kastoorchand ..	47,74,250	913	79,414
	Madhorao Scindia ..	38,00,000	604	44,320
	Mathradas	24,00,000	907	43,596
		1,34,59,250	3,086	203,214
Cursetji Jamsetji A. Wadia.	Crescent	15,00,000	1,054	44,688
	Currimbhoy	22,00,000	1,050	86,804
	Ebrahim Pabaney ..	20,00,000	1,054	57,880
	Fazulbhoy	18,00,000	1,268	52,256
	Pearl	19,97,000	1,760	49,356
	Premier	19,97,880	472	15,260
		1,14,94,880	6,658	306,244

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

SIR IBRAHIM RAHIMTOOLA, K.C.S.I., C.I.E.

SIR PURSHOTUMDAS THAKURDAS, KT., C.I.E., M.B.E.

THE HON. SIR CHUNILAL V. MEHTA, KT.

THE HON. SIR COWASJEE JEHANGIR, K.C.I.E., C.I.E., O.B.E.

Parsi Directors—Mill Agents and Merchants—*contd.*

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
Byramjee Jeejeebhoy.	Bradbury	24,85,000	662	35,884
	Coorla	13,00,000	719	27,640
	Colaba Land ..	28,00,000	697	44,792
	Framjee Petit ..	12,50,000	929	32,584
	Manockjee Petit ..	36,09,500	5,000	153,660
	Dinshaw Petit ..			
	Bomanji Petit ..			
	New City of Bombay	6,00,000	....	47,160
	New Great Eastern..	23,00,000	1,058	49,668
		1,43,44,500	9,065	391,388
Hon. Sir Phiroze Sethna, O.B.E.	Assur Virjee * ..	31,97,820	600	39,208
	Bombay Cotton ..	22,40,770	795	33,648
	Bradbury	24,85,000	662	35,884
	David	24,00,000	1,130	82,626
	Globe	10,00,000	744	29,104
	Jamshed	13,32,100	494	31,300
	Kastoorchand ..	47,74,250	913	79,414
	Madhowji Dharamsi.	20,23,750	903	37,812
	Madhorao Scindia ..	38,00,000	604	44,320
	Mathradas	24,00,000	907	43,596
	Simplex *	22,50,000	1,230	37,208
	Sir Shapurji Bhroacha.	74,94,695	697	97,284
		3,53,98,385	9,679	591,404
Sir Jamsetjee Jeejeebhoy, Bart., K.C.S.I.	Bombay Dyeing ..	62,74,500	4,810	180,296
	Crescent	15,00,000	1,054	44,688
	Currimbhoy	22,00,000	1,050	86,804
	Colaba Land. ..	28,00,000	697	44,792
	Century	18,50,000	2,996	104,680
	Ebrahim Pabaney ..	20,00,000	1,054	57,880
	Fazulbhoy	18,00,000	1,268	52,256
	Globe..	10,00,000	744	29,104
	New City of Bombay	6,00,000	...	47,160
	New Great Eastern..	23,00,000	1,058	49,668
	Phœnix	8,00,000	696	52,500
	Pearl	19,97,000	1,760	49,356
	Premier	19,97,880	472	15,260
		2,71,19,380	17,659	814,444

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

Parsi Directors—Mill Agents and Merchants—*contd.*

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
S. R. Bomanjee ..	Edward Sassoon ..	17,00,000	868	45,408
	Sassoon United ..	6,00,00,000	6,732	254,782
	Meyer Sassoon ..	10,00,000	1,012	42,312
		6,27,00,000	8,612	342,502
T. R. N. Cama	Morarjee Goculdas ..	11,50,000	1,607	82,532
Dhanjeebhoy B. Petit.	Emperor Edward *..	15,00,000	1,383	46,452
Sir Dinshaw M. Petit, Bart., K.C.S.I.	Framjee Petit *	12,50,000	929	32,584
	Manockjee Petit * ..			
	Dinshaw Petit * ..	36,09,500	5,000	1,53,660
	Bomanji Petit * ..			
		48,59,500	5,929	1,86,244
Jehangir B. Petit ..	Emperor Edward ..	15,00,000	1,383	46,452
	Framjee Petit * ..	12,50,000	929	32,584
	Manockjee Petit * ..			
	Dinshaw Petit * ..	36,09,500	5,000	153,660
	Bomanji Petit * ..			
		63,59,500	7,312	232,696
Manockjee Cowasji Petit.	Framjee Petit * ..	12,50,000	929	32,584
	Manockjee Petit * ..			
	Dinshaw Petit * ..	36,09,500	5,000	153,660
	Bomanji Petit * ..			
		48,59,500	5,929	186,244
Sorabjee Cowasjee Petit.	Framjee Petit ..	12,50,000	929	32,584
Dadabhoy M. Jeejeebhoy.	Emperor Edward ..	15,00,000	1,383	46,452
	Framji Petit.. ..	12,50,000	929	32,584
	Manockji Petit ..			
	Dinshaw Petit ..	36,09,500	5,000	153,660
	Bomanjee Petit ..			
		63,59,500	7,312	232,696

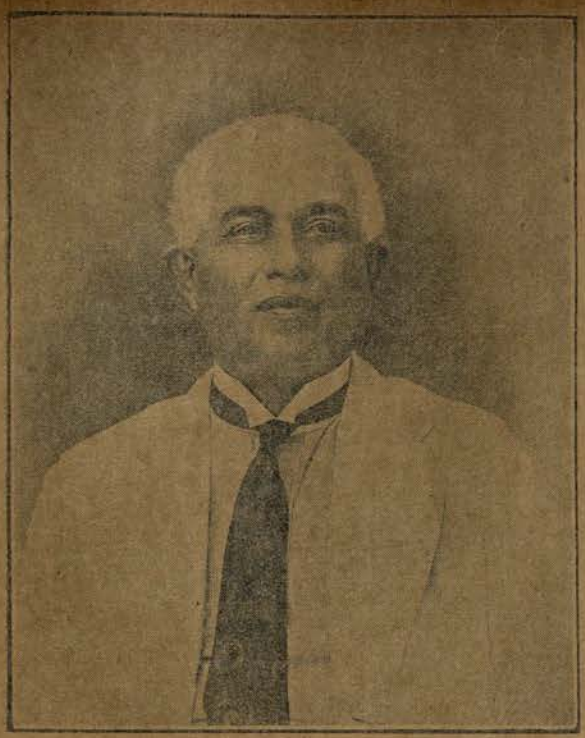
* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

MR. N. B. SAKLATVALA, C.I.E.

SIR MANEKJI B. DADABHOY, KT., C.I.E.

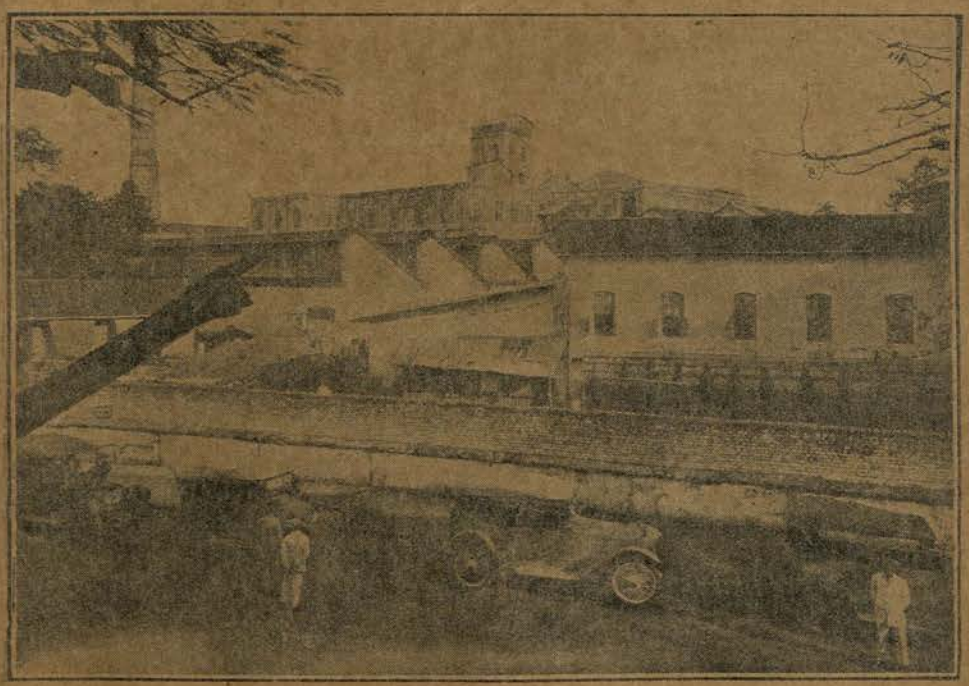
SIR HORMASJI COWASJI ADENWALA, KT.
M.V.O., O.B.E.

MR. JAMSETJI ARDESHIR WADIA.



[*Photo : Vernon.*

MR. H. M. MEHTA.



[*Architects : Messrs. Taraporevala & Bharucha.*

THE VICTORIA MILL.

The Mill changed hands several times but has become a prosperous concern under Mr. Mehta's direction since 1913.

Parsi Directors—Mill Agents and Merchants—*contd.*

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
Hormusjee Rustomjee Umrigar	Diamond	39,17,918	758	34,552
Sir Cowasjee Jehangir, Bart., K.C.S.I.	Coorla *	13,00,000	719	27,640
	Diamond	39,17,918	758	34,552
		52,17,918	1,477	62,192
H. F. Commissariat ..	Assur Virjee * ..	31,97,820	600	39,208
	Bombay Cotton * ..	22,40,770	795	33,648
	Jamshed *	13,32,100	494	31,300
	Ruby *	12,00,000	365	11,996
		79,70,690	2,254	116,152
H. M. Mehta ..	Coorla	13,00,000	719	27,640
	Edward Sassoon ..	17,00,000	868	45,408
	Jubilee *	15,00,000	452	39,252
	Victoria *	8,00,000	556	27,000
		53,00,000	2,595	139,300
Mani H. M. Mehta ..	Jubilee	15,00,000	452	39,252
	Victoria	8,00,000	556	27,000
		23,00,000	1,008	66,252
Ardeshir Bomanji Dubash.	Bombay Cotton * ..	22,40,770	795	33,648
	Jamshed *	13,32,100	494	31,300
	Ruby .. *	12,00,000	365	11,996
		47,72,870	1,654	76,944
K. A. Dubash	Ruby	12,00,000	365	11,996
Byramjee Nowrosjee Gamadia	Emperor Edward ..	15,00,000	1,383	46,452
Sir Hormasji Cowasji Adenwala, Kt.	Diamond	39,17,918	758	34,552
	Jiwraj Balloo ..	11,10,000	663	33,516
		50,27,918	1,421	68,068
Jeejeebhoy R. B. Jeejeebhoy	Bradbury	24,85,000	662	35,884
S. E. Warden	Khatau Makanji ..	30,00,000	1,512	62,844
Gustadji D. Bilimoria ..	Ruby *	12,00,000	365	11,996

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

Parsi Directors—Solicitors and Advocates.

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
Rustam K. R. Cama.. (Solicitor)	Bombay Cotton ..	22,40,770	795	33,648
	Crown	8,00,000	968	41,768
		30,40,770	1,763	75,416
F. E. Dinshaw .. (Solicitor)	Assur Virjee * ..	31,97,820	600	39,208
	Apollo	25,00,000	896	39,654
	Bombay Cotton ..	22,40,770	795	33,648
	Bradbury	24,85,000	662	35,884
	Crescent	15,00,000	1,054	44,688
	Currimbhoy	22,00,000	1,050	86,804
	David	24,00,000	1,130	82,626
	Dawn	8,00,000	*Nil*	39,816
	Ebrahim Pabaney ..	20,00,000	1,054	57,880
	Edward Sassoon ..	17,00,000	868	45,408
	Elphinstone	50,00,000	764	49,064
	Finlay	20,00,000	812	46,072
	Fazulbhoy	18,00,000	1,268	52,256
	Gold Mohur	30,62,450	1,040	42,472
	Jamshed	13,32,100	494	31,300
	Kastoorchand ..	47,74,250	913	79,444
	Khatau Makanji ..	30,00,000	1,512	62,844
	Madhorao Scindia ..	38,00,000	604	44,320
	Madhowji Dharamsi *	20,23,750	903	37,812
	Meyer Sassoon ..	10,00,000	1,012	42,312
	Moon	2,50,000	736	38,494
	Morarjee Goculdas ..	11,50,000	1,607	82,532
	Mathradas	24,00,000	907	43,536
	Phœnix	8,00,000	696	52,500
	Pearl	19,97,000	1,760	49,356
	Premier	19,97,880	472	15,260
	Sassoon United ..	6,00,00,000	6,732	254,782
	Simplex	22,50,000	1,230	37,208
	Sir Shapurji Broacha *	74,94,695	697	97,284
	Swan	10,00,000	600	31,616
		12,81,55,715	32,868	1,696,140
J. D. Gandhi ... .. (Solicitor)	Swadeshi	20,00,000	2,729	104,212
	No. 2 Bom. United..			
A. P. Sabavala .. (Bar-at-Law)	Coorla	13,00,000	719	27,640
Khurshedji Dhanjeebhoy Shroff .. (Solicitor)	Bombay Cotton ...	22,40,770	795	33,648

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

Parsi Directors—Solicitors and Advocates—*contd.*

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
J. B. Bomen Beheram.. (Solicitor)	Khatau Makanji ..	30,00,000	1,512	62,844
F. R. Wadia .. .. (Solicitor)	Moon *	2,50,000	756	38,494
	Sassoon	22,50,000	1,222	60,240
	Union	5,00,000	866	38,176
	Simplex	22,50,000	1,230	37,208
		52,50,000	4,074	1,74,118
J. A. D. Naoroji, .. (Bar-at-Law)	Tata	64,87,100	1,800	63,248
H. P. Mody .. .. (Advocate)	Century *	18,50,000	2,996	104,680
F. H. Vakeel .. (Solicitor)	Birla	60,98,800	400	44,678

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

THE MOON MILLS.
Mr. Silas E. Sassoon (front) laying the foundation-stone on May 20th, 1897.

THE LATE MR. P. A. HORMARJEE.

MR. N. P. WHADDIA.

MR. C. P. WADIA.

Partners in the firm of Messrs. P. A. Hormarjee & Co., Agents of the Moon Mills.

MR. BYRAMJI JEEJEEBHOY.

MR. MEYER NISSIM.

MR. DHUNJIBHOY B. PETIT.

MR. ISHWARDAS LUKHMIDAS.

Hindu Directors—Mill Agents and Merchants.

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
Ambalal Sarabhai ..	Apollo	25,00,000	896	39,654
	Madhowji Dharamsey	20,23,750	903	37,812
	Morarji Goculdas..	11,50,000	1,607	82,532
	Sir Shapurji Bharocha ..	74,94,695	697	97,284
		1,31,68,445	4,103	257,282
Bhagwandas Hargovindas.	Alliance * ..	7,00,000	592	28,116
Chhagan Gopaljee ..	Ruby *	12,00,000	365	11,996
Ishwardas Lakhmidas ..	Sassoon	22,50,000	1,222	60,240
	Union	5,00,000	866	38,176
		27,50,000	2,088	98,416
Kikabhai Premchand ..	Coorla	13,00,000	719	27,640
	Kastoorchand ..	47,74,250	913	79,414
	Killachand ..	40,33,445	*Nil.*	43,846
		1,01,07,695	1,632	150,900
Kedarmul Bhuramul ..	Diamond * ..	39,17,918	758	34,552
Rao Saheb Khimjee Cooverjee.	Edward Sassoon ..	17,00,000	868	45,408
	Meyer Sassoon ..	10,00,000	1,012	42,312
		27,00,000	1,880	87,720
Sir Lallubhai Samaldas, C.I.E.	Killachand ..	40,33,445	*Nil.*	43,846
	Tata ..	64,87,100	1,800	63,248
	Western India ..	12,00,000	977	41,760
		1,17,20,545	2,777	148,854
Maneklal Ujemshi ..	Bombay Industrial.	9,98,750	566	24,432
Sir Purshotamdas Thakurdas, C.I.E., M.B.E.	Alliance	7,00,000	592	28,116
	Colaba Land ..	28,00,000	697	44,792
	Kohinoor	20,00,000	1,394	68,996
	Killachand ..	40,33,445	*Nil.*	43,846
		95,33,445	2,683	185,750

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

Hindu Directors—Mill Agents and Merchants—*contd.*

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
Purshotam Jiwandas	.. Bombay Cotton ..	22,40,770	795	33,648
Ramdas Narandas	.. Kohinoor	20,00,000	1,394	68,996
Shantidas Askuran.	Kohinoor.. ..	20,00,000	1,394	68,996
	New Great Eastern	23,00,000	1,058	49,668
		43,00,000	2,452	1,18,664
Vasonji Vithaldas.	Hindoostan ..	12,00,000	1,167	41,056
	Indian Mfg.* ..	900,000	960	41,328
		21,00,000	2,127	82,384
Gopaldas Nathoobhai	.. New Kaiser-i-Hind..	9,00,000	1,104	40,944
Jethabhai Mooljee	.. New Kaiser-i-Hind *	9,00,000	1,104	40,944
Jamnadas Vassonjee	.. New Kaiser-i-Hind *	9,00,000	1,104	40,944
Karsondas Thackersey Rowjee.	Jivraj Balloo ..	11,00,000	663	33,516
Keshowjee Morarjee	.. New Kaiser-i-Hind *	9,00,000	1,104	40,944
Jivraj Vassonjee..	.. New Kaiser-i-Hind	9,00,000	1,104	40,944
Luxmidas Vandrawandas.	New Kaiser-i-Hind	9,00,000	1,104	40,944
Maganlal Prabhudas	.. Presidency * ..	12,00,000	840	32,624
Meghji Jeram	.. Jam	12,00,000	874	30,520
Sunderdas Thakersey	.. Jam	12,00,000	874	30,520
Vallabdhas Raghavji	.. Jam *	12,00,000	874	30,520
Parshotam Mulji	.. Jam	12,00,000	874	30,520
Jamnadas Kalianji	.. Jam	12,00,000	874	30,520
Vithaldas Naranji	.. Jam*	12,00,000	874	30,520
Lalji Morarji	.. Jam	12,00,000	874	30,520
Ragavji Khimjee	Jam *	12,00,000	874	30,520
	New Kaiser-i-Hind	9,00,000	1,104	40,944
	Presidency	12,00,000	840	32,624
		33,00,000	2,818	1,04,088
Pranjivandas Vassonji	.. New Kaiser-i-Hind *	9,00,000	1,104	40,944
Samirmalji A. Ajmera	.. Planet *	15,00,000	929	31,586
Hiralal C. Patni..	.. Planet *	15,00,000	929	31,586
P. Gulraj Shinghani	.. Simplex	22,50,000	1,230	37,208

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

Hindu Directors—Mill Agents and Merchants—*contd.*

Name.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
Chamanlal G. Parekh ..	Alliance	7,00,000	592	28,116
	Jubilee *	15,00,000	452	39,252
	Victoria *	8,00,000	556	27,000
		30,00,000	1,600	94,368
Chhotalal Kilachand ..	Kilachand ..	40,33,445	*Nil*	43,846
Dharamsey Ratansey ..	Ruby *	12,00,000	365	11,996
Gokuldas Dongersey ..	Ruby *	12,00,000	365	11,996
Gulabchand Devchand ..	Diamond * ..	39,17,918	758	34,552
Harilal Dwarkadas Mody ..	Alliance *	7,00,000	592	28,116
Hargovinddas Jamnadas Ramji.	Hindoostan * ..	12,00,000	1,167	41,056
	New Kaiser-i-Hind.*	9,00,000	1,104	40,944
	Western India * ..	12,00,000	977	41,760
		33,00,000	3,248	123,760
Jagjiwan Ujemshi Mooljee.	Bombay Industrial.	19,98,750	566	24,432
Karsondas Dharamsey Soonderdas	Western India ..	12,00,000	977	41,760
L. H. Daga	Birla * ..	6,098,800	400	44,678
Khimji Assur	Assur Virjee * ..	31,97,820	600	39,208
Rao Bahadur Killachand Devchand	Killachand * ..	40,33,445	*Nil*	43,846
Lakhmidas Vandrawandas Ramji	Indian Mfg. ..	9,00,000	960	41,328
Laljee Naranjee ..	Finlay	20,00,000	812	46,072
	Swan	10,00,000	600	31,616
	Gold Mohur	30,62,450	1,040	42,472
		60,62,450	2,452	1,20,160
Madhowji D. Morarjee ..	Morarjee Goculdas *	11,50,000	1,607	82,532
Madhavjee Damodher Thackersey.	Crown *	800,000	968	41,768
	Hindoostan * ..	12,00,000	1,167	41,056
	Indian Mfg. * ..	9,00,000	960	41,328
	Western India * ..	12,00,000	977	41,760
		41,00,000	4,072	165,912

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

THE HON'BLE SIR DINSHAW WACHA, KT., M.C.S. [*Photo : Clifton.*

In the midst of his political and civic activities Sir Dinshaw Wacha has been closely associated with the cotton industry of this Presidency and is a recognised authority on questions affecting its interests. His enormous capacity for work, the intellectual keenness which he brings to bear on public questions as they arise, his power of grasping and comprehending the most intricate problems in finance and economics and, above all, the honesty of his efforts have worthily obtained for him the distinguished position he enjoys as Bombay's leading citizen.

SIR JOSEPH KAY, KT.

MR. H. P. MODY. (ADVOCATE.)

MR. S. D. SAKLATVALA.

MR. A. GEDDIS.

Hindu Directors—Mill Agents and Merchants—*contd.*

Names	Mills.	Paid-up Capital. Rs.	Looms.	Spindles
Manubhai Rangildas	Alliance *	7,00,000	592	28,116
Chandulal Achutlal	New China	13,25,000	*Nil.*	46,064
Hon. Sir Manmohandas Ramjee.	Hindoostan *	12,00,000	1,167	41,056
	New Kaiser-i-Hind,*	9,00,000	1,104	40,944
	Indian Mfg. *	9,00,000	960	41,328
		30,00,000	3,231	123,328
Mangaldas G. Parekh	Jubilee *	15,00,000	452	39,252
	Victoria *	8,00,000	556	27,000
		23,00,000	1,008	66,252
Mafatlal Gagalbhai	Kohinoor	20,00,000	1,394	68,996
	New China*	13,25,000	*Nil.*	46,064
	Standard	12,00,000	1,179	44,536
		45,25,000	2,573	159,596
Mavji Govindjee Sheth	Bombay Industrial.	19,98,750	566	24,432
Mooljee Haridas	Assur Virjee	31,97,820	600	39,208
	Presidency	12,00,000	840	32,624
		43,97,820	1,440	71,832
Morarjee Mulraj Khatau	Khatau Makanjee *	9,95,000	1,512	62,844
Motilal Kanjee	Alliance	7,00,000	592	28,116
	Presidency	12,00,000	840	32,624
		19,00,000	1,432	60,740
Mulraj Khatau	Khatau Makanjee *	29,95,000	1,512	62,844
Nandlal Killachand	Killachand *	40,33,445	*Nil.*	43,864
Narottam Morarjee	Century	18,50,000	2,996	104,680
	Sassoon United	6,00,00,000	6,732	254,782
	Morarjee Goculdas *	11,50,000	1,607	82,532
	Swadeshi	20,00,000	2,729	104,212
	Tata	64,87,100	1,800	63,248
		7,14,87,100	15,864	609,454
Pransukhlal Mafatlal	Standard	12,00,000	1,179	44,536
	New China*	13,25,000	*Nil.*	46,064
		25,25,000	1,179	90,600

*The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

Hindu Directors—Mill Agents and Merchants—*contd.*

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
Ramnarain Hurnandrai.	Dawn	8,00,000	*Nil.*	39,816
	Phœnix *	8,00,000	696	52,500
		16,00,000	696	92,316
Ratansey D. Morarjee ..	Morarjee Goculdas *	11,50,000	1,607	82,532
	Simplex	22,50,000	1,230	37,208
		34,00,000	2,837	119,740
Trikamdas Mulraj Khatau .	Khatau Makanji * ..	30,00,000	1,512	62,844
Trikamdas D. Morarjee ..	Morarjee Goculdas *	11,50,000	1,607	82,532
Tulsidas Gordhandas ..	Khatau Makanji * ..	9,95,000	1,512	62,844
Dwarkadas Ranchoddas ..	Presidency * ..	12,00,000	840	32,624
Damodar Govindjee Madhowjee.	Crown *	8,00,000	968	41,768
Naranji Dwarkadas ..	Jivraj Balloo ..	11,00,000	663	33,516
C. P. Parekh..	New China	13,25,000	*Nil.*	46,064
Raja Bahadur Ragya Bhushan Kalyanmall Tillokchand.	Planet *	15,00,000	929	31,586
Rai Bahadur Sheth Kastoorchandji Onkerji.	Planet *	15,00,000	929	31,586
Chandulal V. Divan (Solicitor)	Kilachand	40,33,445	*Nil.*	43,846
D. L. Vaidya .. (Solicitor)	Apollo	25,00,000	896	39,654
	Elphinstone	50,00,000	764	49,064
		75,00,000	1,660	88,718
Tribhowandas N. Malvi. (Solicitor)	Alliance	7,00,000	592	28,116

*The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

THE BOMBAY MILLHANDS IN WHOSE WELFARE H. E. Sir LESLIE WILSON TAKES PERSONAL INTEREST. [Photo Copyright.

H. E. Sir LESLIE ORME WILSON, P.C., G.C.I.E., C.M.G., D.S.O.
Governor of Bombay.

Mahomedan Directors—Mill Agents and Merchants.

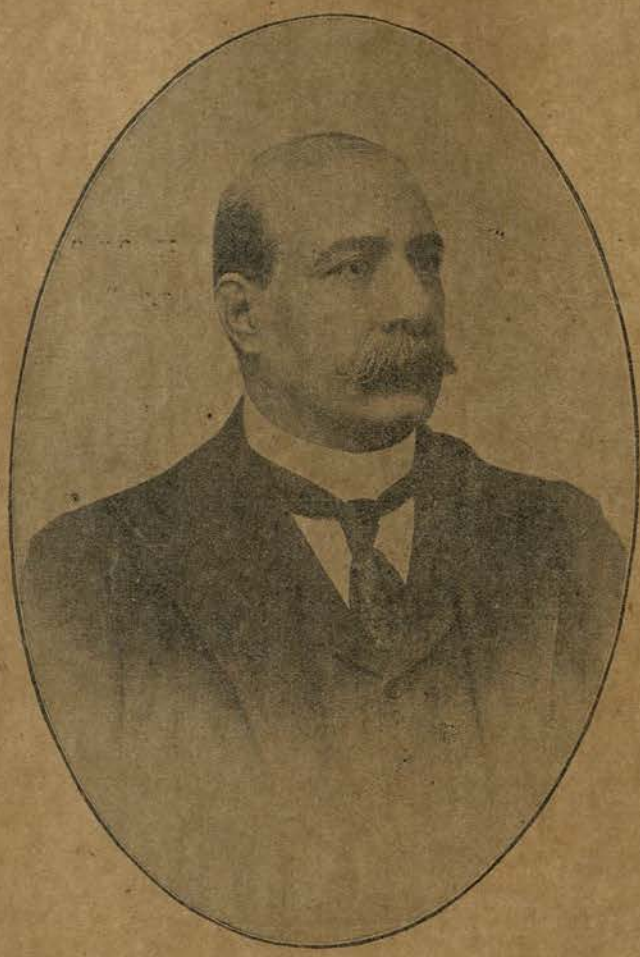
Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
Sir Currimbhoy Ebrahim, Bart.	Bradbury * ..	24,85,000	662	35,884
	Crescent * ..	15,00,000	1,054	44,688
	Currimbhoy * ..	22,00,000	1,050	86,804
	Ebrahim Pabaney. *	20,00,000	1,054	57,880
	Fazulbhoy * ..	18,00,000	1,268	52,256
	Kastoorchand * ..	47,74,250	913	79,414
	Madhorao Scindia. *	38,00,000	604	44,320
	Mathradas * ..	24,00,000	907	43,596
	Pearl *	19,97,000	1,760	49,356
	Premier *	19,97,880	472	15,260
		2,49,54,130	9,744	509,458
Sir Fazulbhoy Currimbhoy., Kt., C.B.E.	Bradbury * ..	24,85,000	662	35,884
	Crescent *	15,00,000	1,054	44,688
	Currimbhoy * ..	22,00,000	1,050	86,804
	David	24,00,000	1,130	82,626
	Fazulbhoy * ..	18,00,000	1,268	52,256
	Ebrahim Pabaney. *	20,00,000	1,054	57,880
	Sassoon United ..	6,00,00,000	6,732	254,782
	Kastoorchand * ..	47,74,250	913	79,414
	Madhorao Scindia. *	38,00,000	604	44,320
	Mathradas * ..	24,00,000	907	43,596
	Pearl *	19,97,000	1,760	49,356
	Premier *	19,97,880	472	15,260
		8,73,54,130	17,606	846,866
Hooseinbhoy Ahmedbhoy .	Planet *	15,00,000	929	31,586
Hooseinbhoy A. Laljee..	Elphinstone ..	50,00,000	764	49,064
	Jivraj Balloo * ..	11,00,000	663	33,516
		61,00,000	1,427	82,580
Haji Gulam Mahomed Ajam.	Kastoorchand ..	47,74,250	913	79,414
	Mathradas.. ..	24,00,000	907	43,596
	Madhowji * ..	20,23,750	903	37,812
		91,98,000	2,723	160,822
Issa Soomar	Jubilee *	15,00,000	452	39,252
	Victoria *.. ..	8,00,000	556	27,000
		23,00,000	1,008	66,252

*The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

Mahomedan Directors—Mill Agents and Merchants—*contd.*

Names.	Mills.	Paid-up Capital. Rs:	Looms:	Spindles:
Abdul-Razak Nassurbhoy A. Lalljee..	Jivraj Balloo ..	11,00,000	663	33,516
R. B. Birla	Birla	60,98,800	400	44,678
Ahmed Rahim	Planet *	15,00,000	929	31,586
Ismail G. Allana	Birla *	60,98,800	400	44,678
Gulamalli G. Currimbhoy.	Planet *	15,00,000	929	31,586
Fazul D. Allana	Birla *	60,98,800	400	44,678
H. M. Rahimtulla.. ..	Birla *	60,98,800	400	44,678
Ibrahimbhoy F. J. Lalljee.	Jivraj Balloo ..	11,00,000	663	33,516
Jafferbhoy A. Laljee ..	Jivraj Balloo * ..	11,00,000	663	33,516
Kasamali Ahmed Rahim.	Planet *	15,00,000	929	31,586
C. A. Latiff..	Khatau Makanji..	30,00,000	1,512	62,844
Osman Sobani	Elphinstone ..	50,00,000	764	49,064
Sir Mahomed Hajeebhoy, Kt.	Sassoon	22,50,000	1,222	60,240
	Union	5,00,000	866	38,176
		27,50,000	2,088	98,416

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.



THE LATE SIR SASSOON DAVID, BARONET, K.C.I.E.

Sir Sassoon David was the maker of his own fame and fortune as one of the most successful and enterprising of Bombay's citizens. He had been the leading financier in large and important undertakings and had contributed substantially towards the advancement of India's industrial progress and prosperity. As promoter and director of large spinning and weaving factories and commercial and financial projects Sir Sassoon kept up the best traditions of the Jewish race.

MR. LALJEE NARANJEE.

SIR COWASJI JEHANGIR, BARONET, K.C.S.I.

SIR LALUBHOY SAMALDAS, KT. C.I.E.

THE HON. SIR PHIROZE SETHNA, O.B.E.

Jew Directors—Mill Agents and Merchants.

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
J. E. Ezra	.. Dawn *	8,00,000	*Nil*	39,816
Sir Sassoon David, Bart., K.C.S.I.	Bradbury	24,85,000	662	35,884
	Crescent	15,00,000	1,054	44,688
	Currimbhoy ..	22,00,000	1,050	86,804
	Dawn*	8,00,000	*Nil*	39,816
	Ebrahim Pabaney.	20,00,000	1,054	57,880
	Finlay	20,00,000	812	46,072
	Fazulbhoy ..	18,00,000	1,268	52,256
	Gold Mohur ..	30,62,450	1,040	42,422
	Kohinoor	20,00,000	1,394	68,996
	Madhorao Scindia.	38,00,000	604	44,320
	Phœnix	8,00,000	696	52,500
	Pearl	19,97,000	1,760	49,356
	Premier	19,97,880	472	15,260
	Swan	10,00,000	600	31,616
		2,74,42,330	12,466	667,870
Sir Victor Sassoon, Bart.	Apollo *	25,00,000	896	39,654
	Elphinstone * ..	50,00,000	764	49,064
	David *	24,00,000	1,130	82,626
	Edward Sassoon *	17,00,000	868	45,408
	Sassoon United *..	6,00,00,000	6,732	254,782
	Meyer Sassoon * ..'	10,00,000	1,012	42,312
		7,26,00,000	11,402	513,846
Albert Raymond ...	Apollo *	25,00,000	896	39,654
	David *	24,00,000	1,130	82,626
	Edward Sassoon *	17,00,000	868	45,408
	Elphinstone * ..	50,00,000	764	49,064
	Sassoon United *..	6,00,00,000	6,732	254,782
	Meyer Sassoon * ..	10,00,000	1,012	42,312
		7,26,00,000	11,402	513,846
A. J. Raymond ...	Assur Virjee ..	31,97,820	600	39,208
	Apollo *	25,00,000	896	39,654
	David *	24,00,000	1,130	82,626
	Diamond	39,17,918	758	34,552
	Edward Sassoon *	17,00,000	868	45,408
	Elphinstone * ..	50,00,000	764	49,064
	Sassoon United *..	6,00,00,000	6,732	254,782
	Meyer Sassoon * ..	10,00,000	1,012	42,312
	Moon	2,50,000	756	38,494
	Madhowji Dharamsi	20,23,750	903	37,812
	Morarji Goculdas.	11,50,000	1,607	82,532
	Sir Shapurji Broacha.	74,94,695	697	97,284
		9,06,34,183	16,723	843,728
I. David	Jubilee	15,00,000	452	39,252

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

European Directors—Mill Agents and Merchants.

Names.	Mills.	Paid-up Capital. Rs.	Looms.	Spindles.
J. R. Abercrombie ..	Globe *	10,00,000	744	29,104
F. C. Annesley	Kohinoor *	20,00,000	1,394	68,996
T. V. Baddeley	Jamshed	13,32,100	494	31,300
	Simplex *	22,50,000	1,230	37,208
		35,82,100	1,724	68,508
B. Brown	Gold Mohur * .	30,62,450	1,040	42,472
	Finlay *	20,00,000	812	46,072
	Swan *	10,00,000	600	31,616
		60,62,450	2,452	120,160
T. E. Cunningham ..	Globe *	10,00,000	744	29,10
G. Furze	Finlay *	20,00,000	812	46,072
	Swan *	10,00,000	600	31,616
	Gold Mohur * ..	30,62,450	1,040	42,472
		60,62,450	2,452	120,160
A. Geddis	Finlay *	20,00,000	812	46,072
	Gold Mohur * ..	30,62,450	1,040	42,472
	Swan *	10,00,000	600	31,616
		60,62,450	2,452	120,160
A. S. Gillespie	Globe *	10,00,000	744	29,104
J. A. Kay	Colaba Land * ..	28,00,000	697	44,792
	New City of Bombay.*	6,00,000	*Nil.*	47,160
	New Great Eastern *	23,00,000	1,058	49,668
	Bombay Industrial *	19,98,750	566	24,432
		76,98,750	2,321	166,052
C. J. Meager	Simplex	22,50,000	1,230	37,208
Douglas Moir ..	Bombay Industrial *	19,98,750	566	24,432
	Colaba Land * ..	28,00,000	697	44,792
	New Great Eastern *	23,00,000	1,058	49,668
	New City of Bombay *	6,00,000	*Nil.*	47,160
		76,98,750	2,321	166,052

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

European Directors—Mill Agents and Merchants.—*contd.*

Names.	Mills.	Paid-up Capital: Rs.	Looms.	Spindles.
H. H. Sawyer ..	Sassoon *	22,50,000	1,222	60,240
	Union *	5,00,000	866	38,176
		27,50,000	2,088	98,416
D. W. Wilson, C. I. E...	Kohinoor *	20,00,000	1,394	68,996
S. Wood	Sassoon *	22,50,000	1,222	60,240
	Union *	5,00,000	866	38,176
		27,50,000	2,088	98,416
Douglas Forrest ..	New City of Bombay.	6,00,000	*Nil*	47,160
Harry T. Gorrie...	Colaba Land	28,00,000	697	44,792
	New City of Bombay..	6,00,000	*Nil*	47,160
	New Great Eastern ..	23,00,000	1,058	49,668
		57,00,000	1,755	141,620
V. A. Grantham ...	Bombay Dyeing ..	62,74,500	4,810	180,296
N. G. Hunt	Apollo	25,00,000	896	39,654
G. E. D. Langley. ..	Finlay	20,00,000	812	46,072
	Gold Mohur	30,62,450	1,040	42,472
	Swan	10,00,000	600	31,616
		60,62,450	2,452	120,160
N. B. Macbeth † ..	Globe..	10,00,000	744	29,104
F. G. Travers	Sir Shapurji Bharocha	74,94,695	697	97,284
W. Reid †	Bombay Dyeing ..	62,74,500	4,810	180,296
Leslie Blunt .. .. (Solicitor)	Bombay Dyeing ..	62,74,500	4,810	180,296
	Century	18,50,000	2,996	104,680
		81,24,500	7,806	284,976
H. A. H. Payne .. (Solicitor)	Kohinoor	20,00,000	1,394	68,996
	Meyer Sassoon ..	10,00,000	1,012	42,312
		30,00,000	2,406	111,308

* The asterisks indicate that the Directors have a connection with the Agencies of these Mills.

† Technically Trained Directors.

Auditors of Cotton Mills.

AUDITORS and accountants have played an important part in the affairs of joint stock mill companies in Bombay. The Companies Act provides for the nomination of auditors by the shareholders ; they have, however, been invariably selected by the mill agents and directors, and except in badly-managed concerns the appointment has not been opposed. When, however, the profits were less and there was no margin for dividends, the auditors' position was rendered uncomfortable at the annual general meetings when the agency management was attacked and the balance-sheet was subjected to a scrutiny. The general qualifications and *morale* of auditors have, however, undergone a radical change in recent years and the value of an honest and competent mill auditor has been recognised in every well-managed concern.

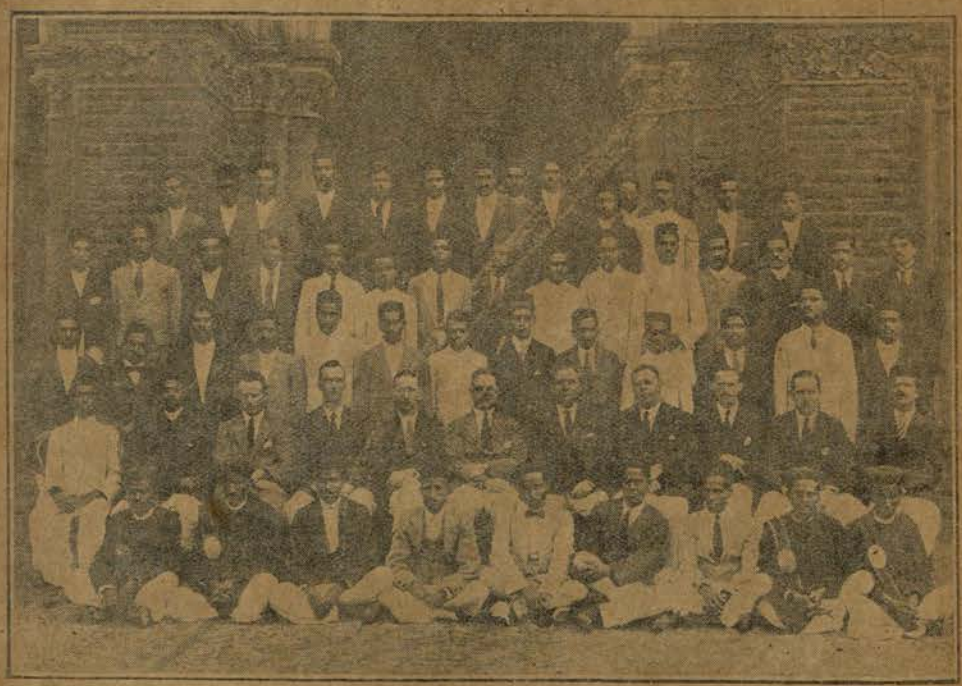
THE LATE MR. PESTONJI KHAREGAT.

THE LATE MR. BAPUJI P. WADIA.

Auditors of the Old School.

Going back to the early years of the mill industry the Parsis were the first to take up auditing work of cotton mills, just as they were among the first to start them. Of the old days, the more prominent have been, Messrs. Pestonji Kharegat, Pestonji Dadabhoy Wadia, Cooverji Mody and Jamsetji Dosabhoy Secretary. Mr. Pestonji Kharegat was considered the soundest of the early accountants, and his name has been honourably associated with the exposure of frauds and irregularities, and his consistent independence and integrity as liquidator of Joint Stock Companies. Messrs. Pestonji Wadia and Cooverji Mody had also a good deal to do with the auditing of cotton mills, the former being known for his bluff independence and conscientious work. Mr. Jamsetji Secretary proved a formidable critic in many a tussle between mill agents and shareholders, representing the interests of the latter against misappropriation and mismanagement.

MR. ALEXANDER FLETCHER FERGUSON.



MESSRS. A. F. FERGUSON & CO.: PARTNERS AND STAFF.

Second Row, on chairs:—Left to right: Messrs. Sitaram G. Wagh, Purshottam V. Telang, C. Watts, B. J. Whitby, A. Gilchrist, H. G. Cocke, W. Turner Green, J. H. Hardie, D. L. Stiven, W. M. Rees and Anant S. Telang.

Later on, Mr. Muncherji Dadina appeared on the scene. He was at one time Secretary in the mill companies which collapsed under Kesowji Naik's management in 1880 and as an important witness he emerged creditably out of the long and complicated trial which resulted in the conviction of Nursey Kesowji. Old Muncherjiba, as he was familiarly known, then took to auditing work and waded through figures to the day of his death.

Mr. Bapuji Pestonji Wadia, who died in October 1921, was one of the respected of the old school of auditors and had the audit of several well-known mills including the Manekji Petit, Framji Petit, Indo-China, Currimbhoy and the Pabani Mills.

Among other prominent auditors was Mr. Nasurwanji Jamsetji who had at one time the largest number of cotton mills under his audit including the Framji Petit, Indo-China, Currimbhoy, Crescent, Maneckji Petit, the Jubilee, the China and the Colaba Land Mills. He was also auditor of the Bombay Millowners' Association for over 20 years. Another well-known and respected auditor, the late Mr. Dorabji H. Ashburner, had a number of mills to his credit, including the following, which he audited in collaboration with Mr. Ratanshaw Bhrocha :—The Phœnix, Gold Mohor, Coronation, Bradbury, Coorla, Globe and the Standard Mills.

European Auditors.

Excepting the late Mr. J. Cornforth no European took up mill auditing until Mr. A. F. Ferguson, who originally came out as an assistant in the house of Messrs. Ritchie, Stewart & Co., Bombay, started audit work in partnership with Mr. Irvine in the year 1890. Since then with change of partnership Messrs. A. F. Ferguson & Co. have had a successful business career amongst cotton mills, their present connections being larger than those of any other firm of auditors. Out of 64 cotton mill companies 28 have entrusted them with their audit work, the aggregate paid-up capital of these concerns amounting to Rs. 12,32,00,145.

Present-day Auditors and Accountants.

It will be seen that the auditors and accountants of the old school had only their experience and reputation to qualify them for important positions in joint stock concerns. As a matter of fact no particular qualifications were prescribed by Government with regard to company auditors, but a new departure was made in 1897 by Mr. N. R. Mistri of Messrs. Cornforth and Mistri who started a Training Institute of Accountancy in Bombay. This venture proved successful and several young men passed out of the Institute with diplomas, some of which were obtained in competitive examinations in accountancy in London and Manchester. Thus the

MR. S. B. BILLIMORIA, M.B.E., J.P.

School or College trained auditors who began competing about the year 1903 stirred up the older members of the profession. Although wanting necessarily in practical and extended experience of the seniors some of these younger rivals showed remarkable pluck and independence in their dealings with mill agents and directors. The prominent of these was Mr. Shapurji B. Billimoria who figured creditably in the prolonged and complicated proceedings of 1909-10 in connection with the defalcations of Dwarkadas Dharamsey and the Directors concerned in the mills which collapsed under him. Mr. Billimoria's reputation and success as a public accountant and auditor has been noteworthy, the number of mill companies audited by his firm being 25 with an aggregate of Rs. 12,15,08,388 in paid-up capital.

Among the other Indian firms Messrs. K. S. Aiyar & Co. control seven firms with a paid-up capital of Rs. 1,46,37,100 in the aggregate. Messrs. Rustomji Modi and Damania stand next with six mills with a total of Rs. 1,17,59,500 while Mr. Nagindas P. Mehta has four mills with Rs. 1,11,48,800 in paid-up capital. Next to this firm come Messrs. Chandabhoy and Jassoobhoy who have three of the Petit Mills and the Kilachand Mills, aggregating a paid-up capital of Rs. 1,03,92,945. Mr. Devidas Vithaldas has the audit of six mills including the Morarjee Gokuldas, the aggregate paid-up capital being Rs. 85,67,918. Messrs. Sorab S. Engineer & Co. have the audit of a total paid-up capital of Rs. 82,00,000 comprising four mills. Mr. Ratanshaw S. Bharucha has the audit of four mill companies with a total of Rs. 76,47,450 in capital while Messrs. Rustomji N. Mehta & Co. have three concerns with a total of Rs. 84,98,800 in paid-up capital.

Certified Auditors under the Indian Companies Act.

The interests of the investing public are safeguarded under Section 144 of the Indian Companies Act, which lays down that no person shall be appointed or act as an auditor of any company unless he holds a certificate from the Local Government. Rules are also prescribed by which members of the following bodies of professional accountants are exempted from the certificates :—

The Institute of Chartered Accountants of England and Wales.
The Society of Incorporated Accountants and Auditors, London
The Society of Accountants in Edinburgh.
The Institute of Accountants and Actuaries in Glasgow.
The Society of Accountants in Aberdeen.
The Institute of Chartered Accountants in Ireland.

The Government of India issue two classes of Certificates, namely, Restricted and Unrestricted, some of which are temporary and others permanent. Holders of Unrestricted Certificates are placed on the same footing as Chartered or Incorporated Accountants of London, being entitled to audit accounts of companies throughout British India including Life Assurance Companies. Holders of Restricted Certificates are entitled to audit accounts of companies within the province except Life Assurance Companies.

Auditors' Council.

An Auditors' Council is established as under to aid the Governor-General in Council in the examination of applications for auditors' certificate, in the issue, suspension and cancellation thereof and generally in exercising disciplinary control over the holders of auditors' certificates in the Presidency of Bombay,—

The Collector of Bombay (*President*).
Messrs. S. B. Billimoria, M.B.E., J.P., Duncan W. Wilson, C.I.E., K. Subramanya Iyer, B.A., F.S.A.A., J.P., H. G. Cocke, A.C.A., M. L. Tannan, I.E.S., B. Com., J.P., and the Secretary, Registrar of Companies, Bombay.

The Sydenham College of Commerce, Bombay, and other institutions prepare candidates for the Accountancy Diploma Board and such candidates after passing their examination and serving their apprenticeship under a qualified auditor are granted Diplomas on the recommendation of the Auditors' Council. They are entitled to use after their names the initials G.D.A. (Government Diploma Auditors) and become holders of Permanent Unrestricted Certificates.

The following are the firms of auditors some or all of whose members have BRITISH QUALIFICATIONS (*i.e.*, Members of Exempted Societies) :—

Chartered Accountants.—Messrs. A. F. Ferguson & Co. and Ford, Rhodes & Parks.

Incorporated Accountants.—Messrs. S. B. Billimoria & Co., K. S. Aiyar & Co., S. S. Engineer & Co., A. S. Madon & Co., Garda Davar & Co., Batliboi & Purohit, Shah & Dalal, D. N. Panday & Co., R. C. Mehta & Co., Cornelius & Davar, and R. P. Dalal & Co.

List of Bombay Cotton Mills under the Audit of the various Accountants and Auditors:—

A. F. Ferguson & Co.	Paid-up Capital. Rs.
Bombay Cotton	22,44,770
Bombay Dyeing	62,74,500
Bombay Industrial	19,98,750
Century	18,50,000
Colaba Land	28,00,000
Crescent	15,00,000
Edward Sassoon	17,00,000
Finlay	20,00,000
Fazulbhoy	18,00,000
Globe	10,00,000
Gold Mohur	30,62,450
Jamshed	13,32,100
Kohinoor	20,00,000
Kasturchand	47,74,250
Madhowji Dharamsi	20,23,750
Meyer Sassoon	10,00,000
Madhorao Scindia	38,00,000
Mathradas	24,00,000
New City of Bombay	6,00,000
New Great Eastern	23,00,000
Pearl	19,97,000
Planet	15,00,000
Premier	19,97,880
Sassoon	22,50,000
Sassoon United	6,00,00,000
Sir Shapurji Broacha	74,94,695
Swan	10,00,000
Union	5,00,000
Total Rs.	12,32,00,145

S. B. Billimoria & Co.	Paid-up Capital. Rs.
Apollo	25,00,000
Assur Virjee	31,42,350
Bradbury	24,85,000
Coorla	13,00,000
Crescent	15,00,000
Currimbhoy	22,00,000
David	24,00,000
Dawn	8,00,000
Diamond	39,17,918
Ebrahim Pabaney	20,00,000
Edward Sassoon	17,00,000
Elphinstone	50,00,000
Jivraj Balloo	11,00,000
Kilachand	40,33,445
Madhorao Scindia	38,00,000
Meyer Sassoon	10,00,000
New Kaiser-i-Hind	9,00,000
Premier	19,97,880
Phœnix	8,00,000
Planet	15,00,000
Sassoon United	6,00,00,000
Sir Shapurji Broacha	74,94,695
Standard	12,00,000
Simplex	22,50,000
Tata	64,87,100
Total Rs.	12,15,08,388

C. H. Sopariwala & Co.

	Rs.
Apollo Mill	25,00,000
Presidency Mill	12,00,000
	37,00,000

J. K. Parulkar.

Jivraj Balloo	11,00,000

A. S. Madon & Co.

	Rs.
Swadeshi Mill	20,00,000

Maneckjee Hormusjee Davar.

Phœnix Mill	8,00,000

Navroz A. Davar, A.S.A.A. (London).

Moon Mill	2,50,000

	Paid-up Capital. Rs.
Sorabjee C. Wadia.	
Moon Mill	2,50,000
K. S. Aiyar & Co.	
Alliance	7,00,000
Hindoostan	12,00,000
Indian Manufacturing	9,00,000
Khatau Makanji	30,00,000
Morarji Gokuldas	11,50,000
Tata Mills	64,87,100
Western India	12,00,000
Total Rs.	1,46,37,100
J. E. Aspinwall & Co.	
Colaba Land	28,00,000
Apaji Amin & Co.	
Assur Virjee	31,42,350
New China	13,25,000
Total Rs.	44,67,350
Ratansha Shapurji Bharucha.	
Bradbury	24,85,000
Coorla	13,00,000
Dawn	8,00,000
Gold Mohur	30,62,450
Total Rs.	76,47,450
Chandabhoy and Jassoobhoy.	
Killachand	40,33,445
Framji Petit	12,50,000
Manockji Petit	36,09,500
Emperor Edward	15,00,000
Total Rs.	1,03,92,945

	Paid-up Capital. Rs.
Devidas Vithaldas.	
Hindoostan	12,00,000
Crown	2,00,000
Diamond	39,17,918
Western India	12,00,000
Indian Manufacturing	9,00,000
Morarji Gokuldas	11,50,000
Total Rs.	85,67,918
Sorab S. Engineer & Co.	
David	24,00,000
Khatau Makanji	30,00,000
Swadeshi	20,00,000
Victoria	8,00,000
Total Rs.	82,00,000
Rustomji E. Mistree.	
Jubilee Mill	15,00,000
Rustomji N. Mehta & Co.	
Birla	60,98,800
Jam	12,00 000
Ruby Mill	12,00,000
Total Rs.	84,98,800
Rustomji Modi and Damania.	
Currimbhoy	22,00,000
Emperor Edward	15,00,000
Ebrahim Pabaney	20,00,000
Manockji Petit	36,09,500
Framji Petit	12,50,000
Standard	12,00,000
Total Rs.	1,17,59,500
Merwanji Hormusji Nicholson.	
New Great Eastern	23,00,000
Nagindas Pranjivandas Mehta.	
Birla	60,98,800
New Great Eastern	23,00,000
Sassoon	22,50,000
Union	5,00,000
Total Rs.	1,11,48,800

Lancashire Men in Bombay Mills.

In the early days of the cotton industry in Bombay, the management of the mills was in the hands of Parsi and Hindu merchants who were necessarily ignorant of the plant and processes of manufacture. The machinery was erected by fitters from Lancashire with the help of natives whom they trained but whose language they did not understand. The carding, spinning and weaving masters were invariably selected and sent out by the makers of the machines, and the different departments were worked by them with the help of Parsi assistants and Hindu jobbers. For many years the success of the factories depended upon the skill and experience of Lancashire managers and the quality of the spinning and weaving machinery the bulk of which came from the best known of British makers. The cotton trade thus made rapid strides and has revolutionised the industrial situation in India, and the present generation of Indian spinners and weavers have to acknowledge with gratitude the services rendered by the early band of Britishers who came out to give practical instruction in the erection and working of cotton machinery at the pioneer factories in Bombay which has brought prosperity to the country and remunerative employment for thousands of its inhabitants.

We are publishing brief notes in another chapter regarding the work of Europeans who have served in the Bombay mills while the photographs on pages 303, 306 and 312 will give the reader an idea of the friendly relations which have existed between the Britisher and his Indian assistants and work-people. We have, however, been unable to secure the particulars and portraits we had desired as most of the Lancashire managers and overlookers have retired to their homes while others are lying in peace in their last resting-place in Bombay city where their life had been spent, often under trying health conditions and discouragement at the hands of inappreciative masters.

The Early Arrivals.

We have mentioned that the first cotton mill to be projected was the Bombay Spinning Mill which started work in 1854, and from the notes published in the *Indian Textile Journal* it would appear that the first Lancashire man to arrive in India and take charge of this pioneer factory was Mr. Peter Rushkin while the Oriental Mill, which was erected soon after, was looked after by Mr. W. Brown. Four more factories were put up by the end of 1860 including the Dharamsey Punjabhoy Mill at Coorla where Mr. Taylor came out at the start followed by Mr. Joseph Sykes in 1865. A dozen more mills were added before the end of 1870 which brought out a further batch of Europeans including Messrs. Simpkins, Wilkinson, Crossdale, Bower, Alcock, Dunckerley, Needham, Mosely, Brembult, Shaw, Rumney, Baldwin, Wrighley, Redfern, Knowles, and Tootil.

These were followed by others as the industry expanded, the number having appreciably increased between 1885 and 1888. The maximum was, however, reached about the year 1895 when there was a total of 104 Europeans in the Bombay mills including managers, engineers, and carding, spinning and weaving masters. The present total is 113, not counting the European staff of 21 electrical engineers, bleachers and finishers as explained on pages 293 and 294.

Fitters and Overlookers at the Pioneer Factories.

In several cases the fitters who had been sent out by the makers to erect the machines at the pioneer factories were placed in charge of the departments as overlookers when the mill began working. This did not always prove satisfactory and even the regular carders and spinners who were recruited by the Manchester agents of the Bombay millowners or by the machine makers, often failed to give satisfaction as they were mostly of the fitter class or men holding minor posts in the Oldham factories. Some of them could hardly read or write and had to carry on the work with the aid of Parsi assistants who were the first in India to take to active mill life. The fitting and erecting of the machines could be done with sufficient efficiency but difficulties were experienced when the mill began working and the necessary calculations and weights had to be adjusted. The yarns were confined to low counts and rarely exceeded 10*s* and later on 20*s*, the spinning being done on the Fly-throstle and on the Mule and the erectors who came out to fit up the complicated parts of the latter machine were looked upon with great respect and admiration by the Parsi staff who also acted as interpreters and lightened the work of the Lancashire men who subsequently came out in larger numbers and with superior qualifications and on better pay.

Englishmen and Parsis.

The good-will that prevailed within the factory in those days made things pretty comfortable for all concerned. The Englishman wanted the job and to do his best and the Parsi wanted to learn and co-operate with him and the relations between the two became friendly and have continued up to the present day. And there are still stray survivors of the old batch of Parsis who remember with gratitude the training they received at the hands of these good Lancashire people, who have not been unmindful of the loyalty of their Parsi colleagues. In a letter to his wife and family who were living at Blackpool, a mill manager wrote in the early eighties in very feeling terms how comforted he was to see three of his Parsi assistants close to his bed on an evening when the doctors had declared that he was suffering from measles. The illness continued and turned into small-pox but still they came and tended and nursed him as one of their own and saw him off on board the ship at Mazagon Bunder in pelting rain, when he was convalescent and left for Liverpool. This is not a solitary incident because the Parsis learnt cotton spinning and weaving in larger numbers than the members of the Hindu or Mahomedan communities and hence the former's contact with the European staff had necessarily been greater and more intimate. Even at the present day the number of Parsis holding responsible posts in the cotton mills of Bombay is in excess of every other community.

Mr. ALFRED BARRATT.

Mr. WALTER GREENWOOD.

A MILL BUNGALOW FOR MANAGERS AND ASSISTANTS.

The Salary and Other Terms.

The salary offered to the European staff for work in the Bombay mills up to about 1885 ranged from Rs. 350 to Rs. 450 for the manager and Rs. 250 to Rs. 300 for the carder, spinner or weaver. In almost every case free quarters were provided with an allowance of oil, fuel and servant. The manager and his assistants had to sign an agreement which fixed the period of the service to two or three years. Some of the terms were, however, one-sided and in favour of the employers as will be seen from the following extracts from an agreement between a mill manager from Oldham and his masters in Bombay :—

NEVERTHELESS it shall be lawful for the Company to determine and put an end to the said service and to this agreement at any time by leaving for the said John Smith at his usual or last known place of abode, three calendar months' notice in writing of their intention to determine the same, and accordingly at the expiration of three calendar months the said service and this agreement shall determine.

THE working hours of the said John Smith shall in the ordinary course of his employment, be daily from six in the morning until sunset, but during any emergency of the existence of which the said Company shall be the sole judges, these hours may be extended in accordance with any order of the said Company.

THE duties of the said John Smith are not to be deemed to be confirmed merely to those of Manager, but he shall also at the request of the said Company, furnish the said Company with all the information in his power which is likely to lead to the prosperity of the said Company.

THE said John Smith shall impart all information, practical or theoretical, in all branches of his duties and to the best of his ability, to all native apprentices and jobbers, and to the work-people under his charge without any additional fee.

Although the above terms were one-sided they suited the managers and overlookers in those days as the good men who found that their work was not appreciated left to join another concern in India, while those who could not get on and saw their mistake in coming out took the return passage and reverted to the home job.

Things were, however, different in subsequent years because with the growth of the mill industry and the better terms that were offered by the millowners after the boom period of 1888 a larger number of the better class of men were induced to come out, bringing with them in several cases their families at the recommendation of friends who had seen the advantage of such a course against the life spent in the solitary mill bungalow or at the public refreshment rooms.

The period 1890 to 1895 brought some of the finest men we have had from Lancashire who have not only kept up the best traditions of the British workmen and overlookers but have saved badly managed concerns

in Bombay from insolvency and while they came out only as carders or spinners they have attained the position of managing agents in charge of some of the most successful of the local factories.

The salary of the staff with a nine hours' working day has been considerably increased in recent years, some managers getting as much as Rs. 1,500 to Rs. 2,000 per month while the carders, spinners and weavers receive Rs. 800 with free quarters which in some cases are in modern buildings with every kind of comfort and convenience. In the well-managed concerns an extra allowance is given for those who study the vernacular language spoken by the work-people.

Relations between the European Staff and Work-people.

The relations between the European staff and the Hindu and Mahomedan jobbers and work-people have invariably been friendly. On occasions when the mills had to be closed during important holidays, flags and bunting were put up in every department of the factory and there was always some feasting on sweets, and male and female workers were happy on receiving the smiles and hand-shakes of the European manager and his assistants and the acceptance of flowers and bouquets by them. The latter scarcely if ever resorted to any rough treatment of the millhands nor did they interfere with their peculiar ways and customs. If there was occasional swearing on their part when instructions were palpably neglected, the work-people knew that it was of an innocent character and free from the vulgar reproofs and beating to which they were accustomed at the hands of their own people. It was the courtesy and kindly treatment of the Lancashire man that the workers appreciated and the good feeling between them continued even during the occasional strikes in individual factories.

The Riots of 1921.

The millhand was, however, urged into a hostile attitude against the European mill staff by political agitators during the visit of the Prince of Wales in October 1921. The first cotton mill was started in Bombay in 1854 and since then men from Lancashire had come out to India and taught the trade and manipulation of the machines to the native jobbers and muccadums, to the piecers and minders, to the weavers and sizers, thousands and thousands of whom have left their villages to become skilled workmen and earn higher wages. These were the people who paid off their benefactors with hooting and stoning during the Bombay riots of 1921, deluded by wire-pullers who had taken no part in the fostering of the mill industry and who had done nothing for the amelioration of the work-people themselves. Time was when a crowd of millhands and jobbers would muster round a single Englishman and peacefully learn the tackling and working of the machines which brought them their daily bread. This had

gone on for years and yet, during the Prince's visit, Englishmen had to face single-handed the brutal and cowardly assaults from hundreds of millhands whom they had never injured or offended. And this treatment was meted out to the subjects of a race who made the machinery to clothe millions of India's inhabitants and taught her people to work it and earn wages far in excess of what they would otherwise have done.

The unhappy incidents of 1921 are, however, being forgotten by the mass of the people and the labouring classes have realised the futility of strikes and rioting at the instigation of mischief-makers. The good feeling between the mill staff and millhands has again been manifest and nothing but a wicked undercurrent can possibly disturb in the future the smooth working of the factories on which depends the welfare of 150,000 work-people and their dependents.

The General Mill Staff in Bombay.

WE have referred to the training of the Bombay mill staff under Lancashire managers who came out to India at the early stage of the industry. As time went on and the number of factories increased the millowners could secure the masters and assistants locally from the Parsi community. The Hindus made excellent jobbers in the carding and spinning departments, while the looms were very skilfully handled by Mahomedan workmen drawn from the hand-loom class of weavers. The engineers were recruited mainly from the marine dockyards and from the steamers which arrived in the harbour with engineers holding Board of Trade certificates. Thus the proportion of Indians in charge of responsible posts in the cotton mills began to increase, the position in 1895 being as under compared with 1925 :—

Years.	*Europeans.*	*Parsis.*	*Hindus.*	*Mahomedans.*	*Jews.*	*Total.*	*Mills.*
1895 ..	104	112	21	5	3	245	70
1925 ..	113	201	67	6	11	398	82

It will be seen that the total number of Parsis employed in 1895 was 112 against the combined total of 133 of the other communities while in 1925 they number 201 against 199 of the other communities.

There was no electric drive in 1895, neither any bleaching or finishing except on a small scale in a few factories. However at the present day almost all the well-equipped mills have bleaching and finishing plants while the electric drive has been introduced on an extensive scale since the starting of the Tata Hydro-electric Works.

As regards the bleaching and finishing masters (page 310) the present total of 51 in the 82 mills is as under :—Europeans 13 ; Parsis 14 ; Hindus 23 and Mahomedan 1. In this case the Hindus form the largest number, *viz.*, 23 against 28 of the other communities.

The total of the electrical engineers (page 311) is 40 of whom 21 are Parsis, 8 Europeans, 9 Hindus, 1 Mahomedan and 1 Jew. It should, however, be noted that with some exceptions these 40 engineers have not had any practical training in electrical works or are diplomaed electrical engineers. The list includes several competent and experienced mechanical engineers who have not found it difficult to understand the working of the dynamos and the motors installed in the factories and are placed in charge of the electrical apparatus in view of their long services in the power-house.

The Mill Staff in 1895 and 1925.

A detailed list of mill managers, engineers and overlookers of Bombay cotton mills (past and present) has been specially prepared and published on pages 297 to 309, of which the following is a summary :—

	Europeans.		*Parsis.*		*Hindus.*		*Mahomedans.*		*Jews.*	
	1895.	1925.	1895.	1925.	1895.	1925.	1895.	1925.	1895.	1925.
Managers ..	27	28	20	32	4	11	2	5	2	3
Carding Masters..	20	27	24	43	6	15	1	0	0	0
Spinning Masters.	21	24	24	39	6	17	0	1	0	0
Weaving Masters.	13	27	12	31	1	10	1	0	0	2
Mech. Engineers.	23	7	32	56	4	14	1	0	1	1
	104	113	112	201	21	67	5	6	3	11

Total staff in 1895 in 70 mills=245. Total staff in 1925 in 82 mills=398.

The Survivors.

The year 1895 has been taken for comparison in the above summary because it was after this period that important changes took place in mill agencies and staff. Mill managers became Mill Agents and Machinery Importers while the higher grade of Lancashire men were requisitioned in larger numbers. Indians with Technological Certificates began to find employments in the local factories so that the mill staff of 1925 is almost wholly different from that of 1895. In fact, out of a total of 245 Europeans and Indians in 1895 only 9 are still at work, some in the same old place where they began life with the fly throstle driven by the slow moving wheel geared engine in a dark and dusty building wholly void of humidity and ventilation.

And it is interesting to note that with one exception these survivors are all Parsis—fitting remnants of a race which pioneered the mill industry and brought wealth and greatness for this city. The names are :—

European : Mr. W. Sutherland.

Parsis : Messrs. C. D. Panday, F. B. Billimoria, N. E. Screwvala, D. D. Katrak, S. S. Kamdin, S. A. Guzdar, A. C. Homji and D. M. Mehta.

MR. CAWOSJI D. PANDAY. THE DOYEN OF MILL MANAGERS.

Mr. Panday joined the old Dharamsey Punjabhoy Mills at Coorla in 1877 and is now Superintending Manager of the Manekji Petit Mills Company.

Mr. BOMENJI ADERJI.

Mr. DHUNJIBHOY F. BATLIVALA.

Mr SHIAVUXA S. D. CAMDIN.

Mr. BAPUJI H. SAKLATVALA.

Mr. SORABJI PALLONJI.

The Mill Staff in 1895 and in 1925.

THE following list records the names of Managers, Carding, Spinning and Weaving Masters, and Mechanical and Electrical Engineers, Bleachers, Finishers and Dyers employed in the Cotton Mills of Bombay in 1895 and in 1925 :—

European Mill Managers, 1895.

(Total 27.)

Baptist, Thomas, Morarji Goculdas.
Bateson, R. H., Queen.
Boon, James, Soonderdass.
Bradbury, J. F., Lukhmidas and Damodar.
Bradbury, W. D., City of Bombay.
Bruce, T., Union Mills.
Crowther, G. H., Britannia Mills.
Engel, J. D. F., Lord Reay.
Entwistle, J., Ripon.
Entwistle, R., Kaiser-i-Hind.
Eyre, R., Connaught and New Empress.
Fraser, John, Presidency.
Hammett, J. C., Star of India.
Harrison, E., Mahomedan.
Hogg, Chas., Jam.
Husselbey, W., Jewraj Balloo.
Mellor, Thomas, Mahaluxmee.
Mills, Thomas, Empress and How. & Bullough.
Parkinson, A. R., Western India.
Peers, Frank, Alliance.
Robinson, George, Sun Mills.
Rowley, J., Jacob Sassoon.
Watson, H., Anglo-Indian.
Watson, Thomas, Imperial and James Greaves.
Wigley, James, Jubilee.
Wood, R., Colaba Land.
Wood, W. C., Peroo Mahomed.

European Mill Managers, 1925.

(Total 28.)

Abbott, G. C., David.
Anderson, J. G., Century.
Atkinson, E. A., Kastoorchand.
Blackwell, R., New City.
Hardman, R. G., Presidency.
Hargreaves, H., Dawn.
Harrison, P. T., Spring.
Harrop, W., Currimbhoy.
Heys, H., Rachel Sassoon.
Holden, T., Edward Sassoon.
Howley, James, Sassoon.
May, Norman, Globe.
Nuttall, H., Premier.
Parry, A., Union.
Pennington, W., Textile.
Pilling, John, Khatau.
Regnaud, F. E., Victoria.
Ridyard, W., Jacob Sassoon.
Shaw, W. L., Finlay and Swan.
Spencer, T., E. D. Sassoon & Alexandra.
Stott, Frank, Pearl.
Taylor, W., Finlay and Swan.
Taylor, W., Sir Shapurji Bharoacha.
Tinker, J., Colaba Land (Superintendent).
Welsh, J., Standard.
Woods, T., Gold Mohur.

Astley, J., Kohinoor, "Assistant."
Mendonca, J., Apollo, "

Parsi Mill Managers, 1895.

(Total 20.)

B. F. Wadia, Dhun Mills.
B. H. Mistry, Hope Mills.
C. D. Panday, Coorla Mills.
G. N. Mehta, Hindoostan.
C. N. Wadia, Dinshaw Petit.
Cowasji F. Lentine, Wahalan Mills.
Dadi. Bomanji, Bombay Cotton.
Dinshaw P. Sethna, Victoria Mills.
D. N. Mulla, Svadeshi.
F. B. Billimoria, New Great Eastern.
H. B. Warden, Oriental Mills.
H. K. Khumbatta, Union Mills.
J. H. Nalaseth, Madhowji Dhurmsey.
Jamsedji Heeraji, Motilal Pitty.
Kharshedji D. Gandhy, Alexandra and E. D. Sassoon.
Kharshedji R. Shroff, China Mills.
M. K. Bhatgara, Hongkong.
Nanabhoy H. Banaji, Jamshed.
Ruttonjee M. Patel, Leopold Mills.
Sorabji N. Wadia, Framji Petit and Mazagon.

Parsi Mill Managers, 1925.

(Total 32.)

C. D. Panday, Manekji Petit (Superintending).
B. K. Dhondy, Coorla.
A. N. Adajania, Simplex.
K. S. Daver, Colaba Land (Assist. Superintendent).
M. D. Wadia, Fazulbhoy.
K. N. Karanjia, Jamshed & Assur.
A. C. Homji, Jivraj Balloo.
S. P. Palkhiwala, Killachand.
A. P. Ghadially, Manockji Petit.
F. B. Billimoria, Western India.
A. R, Bhagwagar, Moon.
R. A. Wadia, New Great Eastern.
D. M. Broacha, Phœnix.
K. M. Sutaria, Swadeshi 1 & 2.
R. M. Daruwala, L.C.E., A.M.I.E. (India), Tata Mills.
K. D. Postwala, Diamond.
R. E. Madon, New China.
M. S. Bhumgara, Khatau (Assist.).
D. A. Tata, Madhowji.
B. S. Cavarana, Bombay Cotton.
S. S. Cavarana, Ruby Mills.
F. P. Shroff, Colaba Land.
B. H. Chavala, Framji Petit.
D. R. Madon, Jam.
R. J. Master, Manchester Mill.
D. M. Marshall, Bomanji Petit.
H. D. Kapadia, Morarji.
J. M. Ghandy, Western India (Assist.).
H. B. Bilimoria, Bombay Industrial.
N. A. Cama, Birla No. 1.
B. B. Wadia, Birla No. 2.
C. P. Sirkari, Jubilee.

Hindu Mill Managers, 1895.

(Total 4.)

Haridass Dayal, Bombay United.
Premjee Khetsey, Wadia Mills.
Thakersey Naronji, Bombay National.
Valabhdas Bhikhaji, Khatau Makanji.

Hindu Mill Managers, 1925.

(Total 11.)

B. S. Pednekar, Apollo.
Anandram Yelji, Crown.
D. G. Patil, Elphinstone.
Nagindas N. Mehta, Motilal Pitty.
R. K. Misra, Alliance.
B. D. Kulkerni, New Islam.
Kalidas F. Shaha, Hindoostan.
U. N. Mehta, Indian Manufacturing.
Ramsing Dongarsingh, Kohinoor.
A. B. Hirji, Planet.
K. B. Samant, Elphinstone (Assist.).

THE LATE MR. SORABJI N. WADIA.

THE LATE MR. PIROSHAW B. MODY.

THE LATE MR. BOMENJI F. WARDEN.

Mahomedan Mill Managers, 1895.

(Total 2.)

Mahomedbhoy Khetsey, Indo-China.
Meheralli Fakira, Currimbhoy.

Jew Mill Managers, 1895.

(Total 2.)

Meyers, S., David Mills.
Reuben, D. J., Standard.

European Carding Masters, 1895.

(Total 20.)

Barnes, E. H., Jacob Sassoon.
Bateson, R. H., Queen Mills.
Bradbury, J. F., Damodhar and Lakhmidas.
Clarke, Levi, E. D. Sassoon.
De Souza, L., Hope Mills.
Duckworth, G., Hindoostan.
Engel, J. D. F., Lord Reay.
Greaves, E., Presidency.
Harrison, Ellis, Mahomedan.
Harrison, R., Indo-China.
Husselbey, Wm., Jiwraj Balloo.
Moseley, John, Indian Mfg.
Newton, Sam, Standard.
Parkinson, A. R., Western India.
Pickering, W., Sassoon Mills.
Ramsden, J., David Mills.
Tattersall, L., Morarji.
Taylor, T., Currimbhoy.
Wigley, James, Jubilee.
Wood, R., Colaba Land.

Mahomedan Mill Managers, 1925.

(Total 5.)

A. Moledina, Bradbury.
Abdulla Currimbhoy, Eb. Pabaney Mills.
Mahomed Cassum, Crescent & Imperial
C. Jafferbhoy, Madhorao Scindia.
S. L. Nanji, Mathradas.

Jew Mill Manager, 1925.

(Total 1.)

Hallegua, A. J., Meyer Sassoon.

Jew Assistant Managers, 1925.

(Total 7.)

Cohen, D. S., Rachel Sassoon.
Gemal, I. B., Edward Sassoon.
Jacob, A., Jacob Sassoon.
Meyer, J. E., David.
Raymond, A. H., Alexandra and E. D. Sassoon.
Raymond, J., Manchester Mill.
Salem, E. E., Meyer Sassoon.

European Carding Masters, 1925.

(Total 27.)

Abbott, G. C., David.
Allenson, J. F., Gold Mohur.
Astley, W., Pearl.
Bignell, F. F., Textile.
Boyd, F., Crescent.
Borker, B. M., Manchester Mill.
Clegg, J., Shapurji Broacha.
Dickinson, W. C., Premier Mills.
Dowling, W., Bradbury.
Eastwood, J., Imperial.
Ekerseley, R., Mathradas.
Hargreaves, H., Dawn.
Heywood, W., Century.
Kemp, H., Madhowji.
Kinsey, J., Sassoon.
Lisboa, F. J., Apollo.
Nolan, J., Fazulbhoy.
Preston, E., Century.
Ramsden, F., Meyer Sassoon.
Robinson, G., Swan.
Smith, W. H., Spring.
Street, W., Currimbhoy.
Sutton, J., Kohinoor.
Taylor, E., Kastoorchand.
Turner, H., E. D. Sassoon.
Watts, J. E., Alexandra.
Wood, C. (Asstt.), Sassoon.

Parsi Carding Masters, 1895.

(Total 24.)

A. Darukanavala, Framji Petit.
Ardeshir Cowasji, Imperial Mills.
B. F. Wadia, Dhun Mills.
E. D. Randeria, Mazagon.
Hormasji B. Hathiram, Svadeshi.
H. K. Khambata, Union Mill.
H. N. Madon, New Great Eastern.
N. E. Screwvalla, Coorla.
H. P. Nalabhoy, Peeroo Mahomed.
J. H. Nalaseth, Madhowji.
J. R. Kanga, Oriental.
K. R. Shroff, China.
M. K. Vatchha, Bomanji Petit.
N. H. Banaji, Jamshed Mills.
N. H. Mehta, Motilal Pitty.
Nasservanji Bhikhaji, Alexandra.
Pestonji B. Lalla, National.
S. N. Cavrana, Wàhàlàn Mills.
Shapurji Aspandiar, Khatau Makanji.
Shapurji Dadabhoy, Dinshaw Petit.
Shapurji Dorabji, Bombay Cotton.
Shapurji Framji, Connaught.
Shapurji Sorabji, City of Bombay.
Sorabji Cowasji, New Empress and How. & Bullough.

Parsi Carding Masters, 1925.

(Total 43.)

K. M. Saklatvala, Crown.
N. J. Batiwalla, Crescent.
N. E. Screwvalla, Coorla.
S. B. Colah, Emp. Edward.
M. E. Bisni, Eb. Pabaney.
S. S. Cavarana, Ruby Mills.
N. A. Cama, Birla 1.
B. S. Cavarana, Bombay Cotton.
B. H. Chavala, Framji Petit.
J. S. Engineer, Assur Veerjee.
P. C. Lantin, Victoria Mills.
A. K. Master, Hindoostan.
K. N. Bharucha, Jamshed.
S. P. Bhawnagri, Madhorao Scindhia.
B. D. Wadia, Manockji Petit.
K. S. Dadachanji, Dinshaw Petit.
J. P. Ghadially, Bomanji Petit.
A. R. Bhagwagar, Moon.
Pestonji B. Lalla, Jiwraj Balloo.
B. S. Khambata, New City.
D. H. Hathiram, New Kaiser-i-Hind.
S. D. Naigaumwalla, Phœnix.
D. A. Wadia, Shapurji Broacha.
S. K. Davar, Shapurji Broacha.
F. S. Dastoor, Swadeshi No. 1.
S. R. Jassoomoney, Swadeshi No. 2.
G. R. Gandhy, New China (Assist.)
R. R. Dalal, Kilachand.
H. M. Vajifdar, Tata.
J. A. Shroff, Union.
B. Pastakia, Kohinoor.
F. D. Hathiram, Colaba Land.
Dinshaw Rustomji, Do. (Assist.)
B. H. Chavala, Framji Petit.
D. R. Madon, Jam.
P. R. Surti, Khatau Makanji.
J. H. Shroff, Simplex.
N. J. Dhenugara, Western India.
F. H. Marshall, Standard.
F. R. Khory, Indian Mfg.
S. D. Todivala, Globe.
B. B. Wadia, Birla No. 2.
R. N. Kavesmanek, Jubilee.

Hindu Carding Masters, 1895.

(Total 6.)

Cooverji Oomersey, Sun Mills.
Gangadas Nanabhai, Alliance.
Hari Daji, James Greaves.
Jaeram Mahadeo, Hongkong.
Runchhod Bhanaji, Anglo-Indian.
V. Ramchunder, Empress.

Hindu Carding Masters, 1925.

(Total 15.)

G. R. Pradhan, Edw. Sassoon.
B. J. Thakur, Sassoon Dye Works.
M. P. Nadkarni, Finlay.
S. T. Pathak, Jivraj Balloo.
S. S. Kolhatkar, Morarjee.
Damodar, B. Kilachand.

Mahomedan Carding Master, 1895.

(Total 1.)

Shaikh Mahomed Shaikh Hussein, Maneckji Petit.

Hindu Carding Masters, 1925.— *(Contd.)*

H. G. Shah, Kilachand.
R. J. Popat, New Great East.
Nagindas N. Mehta, Motilal Pitty.
V. R. Manohar, Alliance.
B. D. Kulkerni, New Islam.
B. Atmaram, Jacob Sassoon.
G. Govind, Elphinstone.
H. R. Jagasia, Planet.
R. V. Kulkarni, Presidency.

European Spinning Masters, 1895.

(Total 21.)

Barker, James, Morarji Goculdas.
Barrett, A., Presidency Mills.
Bateson, R. H., Queen Mills.
Bradbury, J. F., Damodar and Lakhmidas Mills.
Dawson, Frederick, Jacob Sassoon.
DeSouza, L., Hope Mills.
Duckworth, G. H., Hindoostan.
Engel, J. D. F., Lord Reay.
Harrison, Ellis, Mahomedan.
Harrison, R., Indo-China.
Holt, James, Dinshaw Petit.
Hopwood, Robert, E. D. Sassoon.
Husselbey, Wm., Jivraj Balloo.
Mosley, John, Indian Manufacturing.
Newton, Samuel, Standard.
Parkinson, A. R., Western India.
Ramsden, J., David Mills.
Taylor, Thos., Currimbhoy.
Wignall, Thos., Union Mills.
Wood, R., Colaba Land.
Wrigley, W., Sassoon Mills.

European Spinning Masters, 1925.

(Total 24.)

Allenson, J. F., Gold Mohur.
Astley, W., Pearl.
Boyd, F., Crescent.
Brooks, J., Jacob Sassoon.
Bucknall, F., Currimbhoy.
Clegg, J., Shapurji Broacha.
De Souza, F., David.
Dowling, W., Bradbury.
Dickinson, W. C., Premier Mills.
Eastwood, J., Imperial.
Ekerseley, R., Mathradas.
Gregory, W. W., E. D. Sassoon.
Hardwick, H., Spring.
Hargreaves, H., Dawn.
Heywood, W., Century.
Kemp, H., Madhowji.
Kinsey, J., Sassoon.
Nolan, J., Fazulbhoy.
Preston, E., Century.
Robinson, G., Swan.
Sutton, J. A., Kohinoor.
Taylor, E., Kastoorchand.
Watts, J., Alexandra.
Wood, C., Sassoon (Assist.)

Parsi Spinning Masters, 1895.

(Total 24.)

A. E. Kavaskamana, Manockji Petit.
A. F. Darukhanawala, Framji Petit.
Bomanji F. Wadia, Dhun Mills.
Byramji Cowasji, Anglo-Indian.
Dadabhai Nanabhai, New Great East.
Dadabhai Nowroji, Empress.
D. H. Mody, Connaught.
H. N. Kotwal, Mazagon.
H. K. Khumbata, Union Mills.

Parsi Spinning Masters, 1925.

(Total 39.)

N. F. Vajifdar, Textile.
S. S. Bharoocha, Crescent.
K. M. Saklatvala, Crown.
N. E. Screwvala, Coorla.
S. B. Colah, Em. Edward.
H. D. Mody, Eb. Pabaney.
A. K. Master, Hindoostan.
R. R. Dalal, Kilachand.
F. C. Driver, Madhorao Scindhia.

THE HINDUSTAN MILL STAFF IN 1895.

Sitting, Second Row:—Left to right—Fourth Mr. Abaji Babaji (Head Jobber), Mr. Benjamin Mosley (Spinning Master), Mr. Cowasji N. Mehta (Manager), Mr. Soonderji Heerji (Time-keeper), Mr. Dossabhoy Framji (Assistant). Back Row: Mr. Mukandrao Moroba Kearkar, who is standing to the extreme right of the back row, was the Reeling Clerk in 1895 and is now Assistant to the Manager. He and Mr. Dossabhoy Framji are now the only survivors out of the six names we have mentioned.

Parsi Spinning Masters, 1895.—
(Contd.)

J. F. Vajifdar, Bombay United.
J. M. Bandorawala, Alliance Mill.
Kharsedji Dhunjibhai, New Empress.
M. Saklatwalla, Peeroo Mahmd.
Nanabhai H. Banaji, Jamshed.
N. H. Dastoor, How. & Bullough.
N. H. Mehta, Motilal Pitty.
Pestonji B. Mistry, Madhowji.
Pestonji B. Lalla, National Mill.
Rastomji C. Kurma, Bomanji Petit.
Shapurji Burjorji, China Mills.
Shapurji Dorabji, Bombay Cotton.
Sorabji F. Boomla, Alexandra.
Sorabji N. Cavrana, Wàhàlàn Mills.
Sorabji P. Rana, Coorla Mills.

Parsi Spinning Masters, 1925.—
(Contd.)

H. Kavas Cama, Manockji Petit.
S. S. Cavarana, Ruby Mills.
N. A. Cama, Birla 1.
B. S. Cavarana, Bombay Cotton.
F. R. Khory, Indian Mfg. Co.
J. S. Engineer, Assur Veerjee.
R. J. Screwala, Diamond.
R. E. Madon, New China.
R. J. Master, Manchester.
R. D. Merchant, Victoria Mills.
P. N. Secretary, Bomanjee Petit.
A. R. Bhagwagur, Moon.
B. S. Khambatta, New City.
D. H. Hathiram, New Kaiser-i-Hind.
N. P. Kharas, Phœnix.
D. A. Wadia, Shapurji Broacha.
S. K. Davar, Shapurji Broacha.
S. M. Vajifdar, Swadeshi No. 1.
D. J. Daruwala, Swadeshi No. 2.
H. M. Vajifdar, Tata.
J. A. Shroff, Union.
F. D. Hathiram, Colaba Land.
D. Rustomji (Asstt.), Colaba Land.
H. J. Patel, Framji Petit.
D. R. Madon, Jam.
R. C. Kurma, Simplex.
F. H. Marshall, Standard.
R. N. Kavesmaneck, Jubilee.
A. B. Vanjaree, Globe.
B. B. Wadia, Birla No. 2.

Hindu Spinning Masters, 1895
(Total 6.)

Hari Daji, James Greaves.
Jeram Mahadeo, Hongkong.
Premji Khetsy, Wadia Mills.
Shriram Narayen, Imperial Mills.
Tricumdas Cullianji, Sun Mills.
Vithoo Ramjee, Khatau Mills.

Hindu Spinning Masters, 1925.
(Total 17.)

V. S. Pednekar, Apollo.
Raghunath Shanker, Apollo.
B. J. Thakur, Sassoon Dye Works.
R. L. Padwal, Elphinstone.
M. P. Nadkarni, Finlay.
S. T. Pathak, Jivraj Balloo.
V. R. Manohar, Alliance.
Nagindas N. Mehta, Motilal Pitty.
S. S. Kolhatkar, Morarjee.
R. J. Popat, New Great Eastern.
V. R. Nadkarni, West India.
Nar. Baboorao, Ed. Sassoon.
Gopal Daji, Khatau.
N. M. Kadam, Meyer Sassoon.
H. R. Jagasia, Planet.
R. V. Kulkarni, Presidency.
B. V. Desai, Kilachand.

Mahomedan Spinning Master, 1925.

(Total 1.)

N. M. Kadam, Meyer Sassoon.

European Weaving Masters, 1895.

(Total 12.)

Baldwin, Wm., Jivraj Balloo.
Bountiff, S. G., Western India.
Gomes, John, Kaiser-i-Hind.
Holden, Joseph, E. D. Sassoon.
Kirkham, Isaac, Indian Mfg.
Parkinton, S., Khatau Mills.
Scholes, James, Jacob Sassoon.
Smethurst, Sam., Bombay United.
Smith, William, Morarji.
Wareham, E., Presidency.
West, W., Dinshaw Petit.
Whetherill, W., Lord Reay.

European Weaving Masters, 1925.

(Total 27.)

Ashworth, H., Spring.
Ashworth, T., Elphinstone.
Astley, J., Kohinoor.
Boardman, J. E., Mathradas.
Burkett, J. W., Bombay Industrial.
Danson, J. B., Kastoorchand.
Duckworth, N., Currimbhoy.
Dyson, W., Apollo.
Fielden, A., Century.
Edmondson, M., Century.
Grundy, Herbert, Standard.
Hargreaves, T., Sassoon.
Hinchcliffe, T., Textile.
Hinchcliffe, J., Jacob Sassoon.
Johnson, A., Madhorao Scindhia.
Levy, S. J., David.
Mitton, J., Fazulbhoy.
Nuttall, H., Premier.
Parker, J., Finlay.
Pascol, K. R., Western India.
Richard, J. A., Bradbury.
Sharpe, H., Ed. Sassoon.
Smith, A., Crescent.
Stott, Frank, Pearl.
Thornber, J. B., Century.
Uttley, H., Rachel Sassoon.
Warrington, W., Globe.

Parsi Weaving Masters, 1895.

(Total 12.)

Bapuji H. Saklatwala, Mazagon.
Cowasji F. Lentine, Wàhàlàn Mills.
Dadabhai B. Mehta, Bomanji Petit.
D. Darukhanawala, Maneckji Petit.
Dossabhai D. Katrak, Jam Mills.
Edalji Temoolji Baria, Soonderdas.
Merwanji R. Badshaw, Coorla.
Nasservanji K. Mehta, Colaba Land.
Rustomji J. Wadia, Hindoostan.
Shavuksha S. Komdin, Oriental.
Sorabji A. Gazdar, Swadeshi.
Sorabji M. Bharocha, Hongkong.

Parsi Weaving Masters, 1925.

(Total 31.)

Shiavuxa S. D. Camdin, Crown.
J. M. Chinoy, Coorla.
H. D. Postvala, Em. Edward.
F. H. Major, Eb. Pabaney.
B. P. Talati, Jamshed.
F. A. Hayvoy, Jivraj Balloo.
Dossabhoy D. Katrak, Manockji Petit.
S. P. Lalla, Dinshaw Petit.
H. C. Ghandhi, Ruby Mills.
E. P. Patel, E. D. Sassoon and Alexandra.
B. D. Motivala, Alliance.
K. D. Postwala, Diamond.
R. C. Sethna, New Islam.
D. S. Aga, Swadeshi No. 1.

THE SASSOON MILL OFFICIALS AND STAFF IN 1905.
Seated, from left to right (second), Mr. A. G. Dovey; Mr. D. D. Katrak; Mr. J. L. Aspden; Mr. A. B. Shroff; Dr. H. Seervai and Mr. W. Wrigley.

A Lancashire Mill Manager with his Staff of Indian Overlookers and Departmental Heads.
Mr. J. Cunningham, former Manager of the Jacob Sassoon Mills.

Parsi Weaving Masters, 1925.—*(Contd.)*

S. D. Ghasvala, Jubilee.
N. N. Aria, Birla No. 2.
P. P. Mehta, Assur Veerjee.
D. B. Khajotia, Bombay Cotton.
D. R. Mehta, Victoria Mills.
D.R. Billimoria, Bomanji Petit.
A. D. Kapadia, Moon.
B. D. Patell, New Great Eastern.
Sorabji A. Gazdar, Swadeshi No. 1.
E. B. Dordi, Swadeshi No. 2.
R. A. Baliwala, Tata.
J. B. Khajotia, Union.
Merwanji Framji, Colaba Land.
B. C. Gotla, Framjee Petit.
C. M. Badshaw, Jam.
K. P. Engineer, (B. A.) Khatau.
A. N. Adajania, Simplex.

Hindu Weaving Master, 1895.

(Total 1!)

Chunilal N. Dalia, Alliance.

Hindu Weaving Masters, 1925.

(Total 10.)

A. K. Thakore, Indian Mfg.
N. G. Desai, Hindoostan.
M. R. Chawan, Meyer Sassoon.
D. P. Joshi, B.A., Morarjee.
P. H. Godbole, Madhowji.
B. B. Desai, New Kaiser-i-Hind.
V. T. Dhuri, Shapurji Broacha.
J. V. Dave, Gold Mohur.
S. V. Mudhbhatkal, Planet.
L. V. Attarwala, Presidency.

Mahomedan Weaving Master, 1895.

(Total 1.)

Hooseinkhan Ahmedkhan, Alexandra.

Jew Weaving Masters, 1925.

(Total 2.)

Ezra Sion, Phœnix.
Mordacai, J., Manchester.

European Mill Engineers, 1895.

(Total 23.)

Avron, Arthur, Alliance.
Barrett, H., Kaiser-i-Hind.
Broadby, R. J., Empress & Howard Bullough.
Chaves, N., Jiwraj Balloo.
Davies, W. N., Leopold and James Greaves.

European Mill Engineers, 1925.

(Total 7.)

Bradford, W. B., Spring.
Gantzer, H. C., Finlay.
Hendricks, J. L., David.
Pearson, H., Century.
Powell, A., Textile.
Regnaud, F. E., Victoria Mills.
Sutherland, W., Currimbhoy & Premier.

European Mill Engineers, 1895.—
(Contd.)

Engel, J. D. F., Lord Reay.
Fraser, John, Presidency.
George, Henry, Hongkong.
Hammett, J. C., Star of India.
McIntyre, C., Standard.
Powell, E. R., Imperial.
Ross, F. G., Indian Manufacturing.
Skinner, Geo. S., Connaught and New Empress.
Spenser, George, Anglo-Indian.
Stevens, T., China Mills.
Summers, J. A., Queen Mills.
Sutherland, G. A., E. D. Sassoon and Jacob Sassoon.
Sutherland, W., Currimbhoy.
Sweeney, G. F., Manekji Petit.
Thompson, J., Morarji Goculdas.
Tootill, Henry, Oriental Mills.
Vaz, M., Colaba Land.
Whittell, A. L., Union Mills.

Parsi Mill Engineers, 1895.
(Total 32.)

Aderji B. Shroff, Sassoon Mills.
Ardeshir C. Homji, Lukhmidas.
Ardeshir P. Nanavati, Jamshed.
Ardeshir R. Bahadhurji, Damodhur.
B. H. Mistry, Hope Mills.
C. P. Cooper, Bombay United.
D. E. Kavaskamana, Victoria Mills.
D. M. Bharoocha, Piroo Mahomed.
Dadabhai Bomanji, Bombay Cotton.
D. F. Lentin, Bombay National.
Edulji Bomanji, Union.
H. E. Elchidana, Dinshaw Petit.
H. N. Gotla, Sun Mills.
Hormusji Aderji, National.
J. M. Pastakia, David.
Jamsetji Pestonji, City of Bombay.
Jehangir D. Karanee, Svadeshi.
K. Rustamji, New Great East.
N. A. Kandavala, Britannia.
Manekji M. Mehta, Oriental Mills.
M. R. Narielwalla, Dhun Mills.
N. B. Cama, Motilal Pitty.
Naorosji Fakirji, Framji Petit.
Nasservanji D. Karanee, Jubilee.
Nasserwanji N. Cooper, Indo-China.
Pestonji J. Shroff, Mahaluxmi Mills.
R. N. Banajee, Bomanji Petit.

Parsi Mill Engineers, 1925.
(Total 56.)

Baxter, C. R., Elphinstone.
B. H. Mistry, Simplex.
F. D. Kapadia, Indian Manufacturing.
N. B. Katrak, Crown.
R. B. Bhownagri, Coorla.
H. F. Bamji, Dawn.
R. M. Badshaw, Emperor Edward.
E. H. Elchidana, Sassoon Dye Works.
Dadabhoy Nowroji, E. D. Sassoon and Alexandra.
B. M. Colah, Fazulbhoy.
F. R. Bangalee, Hindoostan.
R. P. Vazifdar, Jamshed.
A. C. Homji, Jivraj Balloo.
K. S. Homavazir, Imperial.
D. F. Bandrawala, Madhorao Scindhia.
D. M. Mehta, Manockji Petit.
H. P. Dadyburjor, Dinshaw Petit.
N. B. Mistry, Bomanji Petit.
C. H. Shroff, Bombay Dye Works.
J. H. Warden, New China.
D. P. Wadia, Ebrahim Pabaney.
M. A. Buxey, Bombay Cotton.
D. H. Bhathena, Alliance.
Bomanji H. Engineer, Diamond.
C. R. Baxter, Elphinstone.
Ardeshir D. Jugalwala, Motilal Pitty.

Parsi Mill Engineers, 1895—(*Contd.*)

R. B. Bhownugri, Coorla Mills.
R. C. Engineer, Wadia Mills.
Sorabji Patel, Wàhàlàn Mills.
S. S. Jusawala, Madhowji.
Sorabji N. Wadia, Mazagon.

Hindu Mill Engineers, 1895.
(Total 4.)

Bhagvandas Virchund, Mahomedan.
Damodhur Runchhoddas, Jam Mills.
Runchoddas Bhugvandas, Sunderdas.
Vuiabhdas Bhikhaji, Khatau Makanji.

Mahomedan Mill Engineer, 1895.
(Total 1.)

Zanudin Ebrahim, Alexandra.

Jew Mill Engineer, 1895.
(Total 1.)

Moses, E., Hindoostan and Western India Mills.

Parsi Mill Engineers, 1925.—(*Contd.*)

R. P. Sunavala, Ruby Mills.
R. C. Daruwala, Moon.
P. A. Bhathena, New City.
K. F. Kapadia, New Kaiser-i-Hind.
D. M. Broacha, Phœnix.
R. E. Vatcha, Pearl.
J. N. Rabadi, Sassoon.
K. E. Keyas, Shapurji Broacha.
E. H. Sagdivala, Standard.
D. P. Mistry, Swadeshi No. 1.
P. K. Kavarana, Swadeshi No. 2.
R. E. Arjania, Khatau.
Kaikhosro M. Mehta, Presidency.
M. M. Engineer, Western India.
M. S. Balsara, Tata.
N. A. Shroff, Union.
M. H. Bhaba, Gold Mohur.
N. A. Kandavala, Crescent.
S. B. Patel, Jam.
N. D. Bitla, New Great Eastern.
K. S. Patel, Bradbury.
C. M. Jasavala, Moon.
D. D. Mehta, Assur.
M. D. Shroff, Kohinoor.
K. A. Minocher Homji, Manchester.
Gustad E. Sagar, Mathradas.
Nowroji Fakirji, Birla No. 1.
P. S. Bharucha, Birla No. 2.
S. B. Pavri, Jubilee.
E. F. Elavia, Globe.

Hindu Mill Engineers, 1925.
(Total 14.)

V. B. Chitnis, Apollo.
K. A. Muzumdar, Edward Sassoon.
N. G. Pethe, Rachel Sassoon.
C. J. Shah, New Islam.
D. B. Kulkarni, Jacob Sassoon.
K. S. Iyer, Kastoorchand.
Chubildas Tribhovandas, Killachand.
G. M. Kothare, Swan.
L. K. Jaya, Colaba Land.
W. M. Anja, Framji Petit.
G. M. Tavde, Planet.
Wamanrao Vithoba (Diesel Engine), Khatau.
B. D. Rane, Assur. (Assist.)
Balkrishna Purshotam, Bombay Industrial.

Jew Mill Engineer, 1925.
(Total 1.)

Haskell, M. E., Morarjee.

Bleaching, Finishing and Dyeing Masters in 1925.

(*Copyright.*)

Europeans.

(Total 13.)

Butterworth, C., Meyer Sassoon.
DeSouza, J. B., Bombay Industrial.
Gindill, M. S., Elphinstone.
Green, A., Bombay Dye Works.
Hanson, G. R., Imperial.
Huggins, H., Madhowji.
Isherwood, W. Century.
Lawton, H., Textile.
McPhail, E., E. D. Sassoon, Alexandra and Rachel Sassoon.
Muir, J., Bombay Dye Works.
Peel, A., Textile.
Quiny, N. W., Sassoon Dye Works.
Williams, G. S., Sassoon Dye Works.

Hindus.

(Total 23.)

V. L. Ranade, Apollo.
P. R. Sapre, David.
W. L. Naik, Sassoon Dye Works.
I. P. Daftari, Alexandra and E. D. Sassoon.
B. J. Oka, Jacob Sassoon.
G. R. Sule, Hindoostan.
S. G. Vaidya, Jivraj Balloo.
A. V. Yogi, Kastoorchand.
Lalji Topan, Kohinoor.
V. G. Nair, M.Sc. (Manch.), Morarjee.
V. A. Deodhar, Madhowji.
B. G. Shah, New Kaiser-i-Hind.
D. C. Mahadik, Premier.
V. S. Patwardhan, Standard.
A. M. Sapre, Khatau.
Keshaorao Tambut, Khatau.
V. C. Karve, Presidency.
M. L. Dhuru, Planet.
C. J. Sharma, Simplex.
K. P. Dhur, Sassoon Dye Works.
Y. M. Anaoker, Victoria Mills.
Chandrakant Banoo, Alliance Mill.
D. S. Karandikar, Globe.

Parsis.

(Total 14.)

D. J. Bahadurji, Indian Mfg.
Bomanji Pestonji, Crescent.
Framroze Cursetji, Kohinoor.
P. P. Patel, Manockji Petit.
F. P. Munshi, Bomanji Petit.
P. P. Bharucha, New Great East.
Ardeshir Shapurji, Standard.
K. B. Boga, Planet.
A. K. Jokhi, Moon Mills.
F. H. Seervai, Tata Mills.
Jal N. Patel, Bombay Cotton.
H. C. Ghandhi, Ruby Mills.
N. N. Aria, Birla No. 2.
D. T. Joshi, Jubilee.

Mahomedan.

(Total 1.)

H. L. Doulatzhada, Khatau Mills.

Electrical Engineers in Bombay Cotton Mills in 1925.

(Copyright.)

European Electrical Engineers.

(Total 8.)

Bradford, W. B., Spring.
Cheetham, J. W., Colaba Land, New City, New Great Eastern and Bom. Industrial.
Dias, F., New Kaiser-i-Hind.
Pember, J. D., M.I.E.E., Superintending Engineer, E. D. Sassoon & Co.'s Mills.
Gantzer, H. C., Finlay.
Hendricks, J. L., David.
Larson, H., Century.
Sutherland, W., Currimbhoy and Premier.

Hindu Electrical Engineers.

(Total 9.)

J. M. Pillay, Bradbury & Kastoorchand, Imperial and Mathradas.
K. Muzumdar, Edward Sassoon.
N. G. Pethe, Rachel Sassoon.
D. B. Kulkarni, Jacob Sassoon.
C. N. Nowdar, Bomanji Petit.
U. P. Roy, Madhowji and Shapurji Broacha.
G. M. Kothare, Swan.
M. R. Pillay, Khatau Makanji.
V. B. Chitnis, Apollo Mills.

Mahomedan Electrical Engineer.

(Total 1.)

M. M. Beg, Jacob Mill (Assist.)

Parsi Electrical Engineers.

(Total 21.)

D. D. Mehta, Assur Mill.
F. D. Kapadia, Indian Manufacturing.
N. B. Katrak, Crown.
H. F. Bamji, A.M.I.E., Dawn.
N. Adajania, Emperor Edward.
H. D. Kharas, Alexandra and E. D. Sassoon.
M. A. Buxey, Bombay Cotton.
R. P. Sunavala, Ruby Mills.
B. M. Colah, Fazulbhoy.
F. R. Bangalee, Hindoostan.
D. F. Mehta, Madhorao Scindhia & Pearl.
P. H. Daruwala, Manockji Petit.
B. N. Driver, Bomanji Petit.
R. C. Daruwala, Moon.
D. M. Broach, Phœnix.
R. N. Dalal, Swadeshi No. 1.
J. M. Kuka, Tata.
N. A. Shroff, Union.
M. H. Bhaba, Gold Mohur.
C. N. Adajania, Simplex.
J. H. Warden, New China.
E. F. Elavia, Globe.

Jew Electrical Engineer.

(Total 1.)

Haskell, M. E., Morarjee.

THE SASSOON MILL STAFF IN 1916—20.

Row, Sitting :—Third from left—Mr. B. D. Katrak (Weaving Master), Mr. H. Williamson (Carding Master). Centre Mr. H. Guthrie (Manager). Next Mr. A. Parry (Spinning Master).

THE LATE MR. H. B. SHEPHERD.

MR. C. E. WILKINSON.

MR. T. TAYLOR. MR. R. REDFERN.

Lancashire Managers and their families in Bombay.

MR. H. B. WARDEN.

THE LATE MR. N. K. MEHTA

THE SASSOON MILLS IN 1886.—ENTIRELY UNDER PARSI STAFF.

Sitting, left to right :—Mr. D. D. Katrak (Weaving Master), Mr. Aderji Shroff (Engineer), Mr. P. B. Mody (Manager), Mr. Bomenji E. Patel (Spinning Master).

Standing, left to right :—Mr. A. B. Shikari (Timekeeper), Mr. E. Soloman (Storekeeper), Mr. Mody (Cloth Weigher), Mr. F. F. Mullan (Asstt. Storekeeper) and Mr. Naoroji E. Screwvalla (Carding M

Only two out of the nine members of the above staff are now alive, viz., Mr. Katrak who is in the Manekji and Mr. Screwalla who is at the Goorla Mills.

The Cotton Factory Operative.

ALTHOUGH a good deal has been written of late about the Bombay mill operative and his hours of labour, the scale of pay, and his capacity for work, the general public have but a vague idea of his personality and habits. Comparisons with the Lancashire workman will not help us much, for beyond earning a living by minding the same machines, the British and Indian mill workers have scarcely anything in common. In the earlier days of the textile industry the Indian operative was ignorant and illiterate and far from strong to assert himself and resist the will of his employer. The millowner of the day was then considered an industrial despot in his own factory, subject to no factory restraints or intelligent press criticism. The modern economic question of the employer and the employed under free political institutions was not thought of seriously. But many eventful things happened in Bombay since the date that cotton factories commenced to multiply and the situation was explained in the editorial columns of the *Indian Textile Journal* in 1901 showed that the very demand which arose, after 1882, for the employment of [illegible] skilled labour, led to an intelligent awakening among the operatives, and the first faint throbs of free labour life began to pulsate,—to become sufficiently articulate to warn the employer. Self-interest necessarily became an active force [illegible] competition in skilled labour increased, and as that labour itself for a time became scarce, as a natural sequence, self-assertion, begot of the consciousness of the strength within, became manifest. The operative realised the fact that he was a vital factor in the industrial economy of the city. The machines may be there; the [illegible] drive them may be there; there may be all the raw material for production; but of what avail were all these if his own labour were not employed? He thus began to be keenly alive to his personality and what value to attach to it. He clearly discerned in it the asset of assets to promote his own interest. As more factories shot up in different districts and the demand for labour became more persistent, he became more alive to the elementary principle of supply and demand in practice. In short, the operative grew conscious of his own utility the more he learned how to make his bargain with his employer.

Simultaneously, the force of circumstances which had been dogging the footsteps of the factory task-master, wrought another change. The long hours, with inadequate relief, to which the workpeople were subjected for about 340 days in a year, attracted the attention of philanthropic reformers of the labour conditions in the city. The agitation set on foot by these men soon made the intelligent worker in the cotton factory alive to his future physical and material welfare. Thanks to the guidance of two or three of their class, intelligent and public-spirited, they resolved to emancipate themselves from the bondage, so to say, in which their task-masters had so long held them. These enlightened leaders set on foot the first organisation of labour in the city. They consisted, at first, mostly of the [illegible] jobbers who had passed through the very hard conditions in which they had worked from their youth, and were, therefore, in a position to realise the situation more quickly than the younger men under their training and tutelage. This was in reality a labour league of the operatives, in its primitive stage. The league was valiantly and courageously led by the local reformers, and warmly supported by Lord Shaftesbury from England, thus offered the representatives of the operatives their first opportunity to unburthen their grievances.

The Factory Act of 1892.

The present generation of millowners could not do better than get themselves acquainted with the condition of cotton factory labour in the city prior to the era of the introduction of the Factory Act in 1892 as well as with the literature which the agitation brought to the surface. Many were the statements made on both sides. Of course, each side, to make out its own case, indulged in exaggeration which was quite natural in the heat of any burning controversy. But the concussion of opinions on both sides eventually brought forth a solid result. And it was this. Firstly, that the hours of labour were too long and fatiguing, especially for females; that children, on account of the poverty of the operatives themselves, were also employed in factories to their great physical detriment; that the duration of the midday recess, though nominally half an hour, was practically not more than fifteen or twenty minutes, in a majority of instances; that there was no regularity whatever in the intermission of labour; that the operatives were made to grind at their machines year in and year out, with a stoppage on a Sunday or other day once a month; and that the general hygienic condition and ventilation of the mills was anything but sanitary and wholesome.

On the other hand, certain extenuating circumstances were pleaded on be[half] of the millowners, *viz.*, that the operative was allowed to have his meal in [the] machine room during working hours; that he or she was allowed more than [one] during the day to go out of the room for smoking and other purposes; that h[e] she was permitted leave for two or three months to repair to the native vil[lage] at stated periods for the recruitment of his or her health. Eventu[ally] though not without a severe struggle on the part of the millowner, [the] Factory Act was passed in 1892. This, indeed, was the first impor[tant] stage in the evolution of the cotton mill operative. It was a clear indica[tion] of the strength he had acquired in the interval.

The Awakening of the Operative.

Again, the law of progress brought with it, almost about the [same] another change in him. The school-master was abroad. The gene[rality] workpeople who laboured at their machines before the introduction of [the] tory Act were almost wholly illiterate. But Government had some fe[w] previously introduced, through the agency of the municipality, primary [educa]tion for the masses in the city and a small percentage was able to r[ead] write. This acquisition brought with it a new requirement—the ne[ed] The intelligent organisation which found its birth with the Fact[ory] agitation, was unceasing in its efforts to make the average operative ali[ve] duties and obligations, as much as to his rights and privileges as a f[actor] So it started an organ for his special behoof. It was being read by hund[reds] on a Sunday. Its contents were verbally communicated to thousands of o[thers] who, thereafter, intelligently discussed the same among their cliques and cot[eries] and the operative now understands his relation towards his employer better [than] he did before. Moreover, the reflex influence of the past efforts of Tr[ade] Unions in Lancashire and elsewhere and the repeated strikes of labour in [the] United Kingdom have taught him many a profitable lesson which he knows [how] to put into practice when occasion calls for it. Lastly, other circumst[ances] though outside the pale of the industry, but of an unpleasant nature, h[ave] recent years made him alive to his strength which has unfortunate[ly] misapplied at times under sinister influences.

It would seem, however, that the Bombay millowners, with few [exceptions] remained too indolent to take serious notice of the changes which more tha[n] of a century of the growth of the industry had wrought in the thoughts

of the workpeople and their supporters. Old times had gone when the employers could dominate the operative and compel him to submit to any conditions of work and wages. It would indeed have argued want of practical sagacity on the part of the industrial captains to fail to recognise the new conditions under which the factory workers pursued their daily occupation and the new spirit which animated their action.

Millowners and Labour Unions.

But as time went on, a new and enlightened generation took the place of the old and conservative type of millowners who had neglected the welfare of their employees under the satisfaction that they were earning far more in the mills than in their native villages and that they were taking life easy while at work. The more intelligent and sympathetic class of employers, however, realised the ignorance and illiteracy of the workpeople and the unhealthy and insanitary surroundings in which they lived. Free medical relief and welfare work were consequently undertaken by mill agents who were anxious to be as up to date in their relations with, and treatment of, the millhand as they were in introducing modern machinery and processes. The Welfare Work that is now being done by these employers in the interests of the workpeople and the large sums endowed by them for charitable hospitals, medical relief and other amenities for the labouring classes have been on a scale and efficiency which millowners in other parts of the country might emulate with advantage.

In fact there are labour leaders who appreciate the liberality and Welfare Work done by the mill agents, but no united and successful attempt has so far been made by the Trade Unions to guide the millhand in the right direction and bring him more in touch with the employers whose benevolence and good work for the employees have been far ahead of any practical result achieved by the Unions themselves for the improvement of the labouring classes. The strikes and the actions of the millhands have shown that the Trade Unions so far established have not been popular with all classes of the operatives and that the efforts of the Unions have mainly been directed towards the question of wages, while the practical part of Welfare Work had been done till 1920 by the representatives of the Servants of India Society at the cost of the employers.

The Bombay millowners on their part have remained fair and sympathetic in recent years towards the workpeople whose health and welfare have received every attention at their hands. Housing accommodation, free medical relief, charitable dispensaries and hospitals, creches, Co-operative Credit Societies, grain and cloth shops, recreation grounds, reading rooms, and other comforts have been provided by employers which surpass in their magnitude and munificence the total of the Welfare Work carried on in every other centre of the textile industry in India.

The Attitude of the Operatives.

The mill operatives as a whole remained harmless for more than half a century, going on occasional and short-lived strikes in individual factories; they were usually amenable to the advice of the jobbers, the heads of departments and the Lancashire and Parsi managers, under whom they worked on peacefully, till misguided by political agitators and mischief-makers in 1921 which brought on strife and disputes to the detriment of the best interests of the workpeople themselves and of the industry in general. There have even been instances of disloyalty on the part of the jobbers towards their employers during the riots and strikes, but these instances have been rare as the jobbers were usually drawn from the better class of Marathas and Deccanies and many of them had been employed in the same factory for years

FIELD LIFE OF THE BOMBAY MILLHAND.

THE HOME OF THE BOMBAY MILLHAND. [Photos. Copyright

together if not permanently under the same masters and managers for whom they had regard and respect. Even at the present time there are millowners who can depend upon the loyalty of the jobbers and had it not been for the instigation of certain advisers of the labouring classes, the present generation of mill agents could have worked in harmony with the mill operatives, the majority of whom are still illiterate and ignorant and easily lend themselves to exciting and inflammatory speeches directed designedly towards their "poor earnings" which are admittedly higher than in other local industries and factories.

The Bombay Mill Hands.

In 1925 there were in the cotton mills of Bombay and Kuria 117,230 male and 33,370 female operatives making a total of 150,600 adult workers. These with the addition of 400 male and female children came to an aggregate of 151,000 workpeople in the 82 factories. A small proportion of these would be born in the city, computed at about 15 per cent. According to the *Labour Gazette*, the majority or nearly 40 per cent. come from Ratnagiri, 15 per cent. from Poona and Satara, 5 per cent. from the Kolaba district and 11 per cent. from the United Provinces. The Mahrattas and the Kunbis belong chiefly to Konkan and the Deccan while operatives from the United Provinces who are known as "Bhaias" or "Pardeshis" are more suitable for the Blow Room and the Card Room being less skilful with their fingers than the Maratha spinner or piecer. The Pardeshis generally belong to the Brahmin and the Rajput or Thakur class.

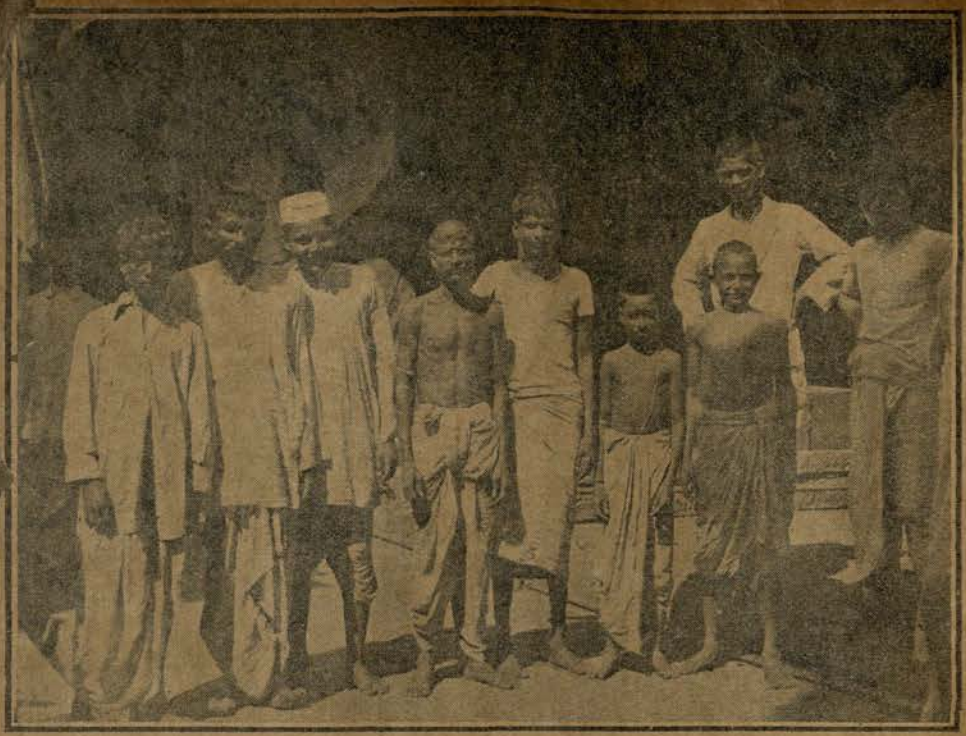
Food and Drink.

The Pardeshis are accustomed to one meal a day, which is substantial and usually consists of wheat bread called *chapatti* with *dal* or pulse cooked in ghee and onions. The Konkan workman has two meals consisting of rice, *dal* and vegetables or *dal* and *chapatti*, the first between 9 and 10 on the mill premises and another when he goes home in the evening. The male worker invariably indulges in bananas, mangoes and other articles sold by the street vendors near the mill gate, while on the way home in the evening a large number resort to the taverns or toddy shops where not only a substantial part of the wages are spent but various kinds of diseases are contracted through the deleterious effects of adulterated drinks and inferior food supply which the average workman is unable to digest.

The jobbers or supervisors who earn from Rs. 125 to Rs. 150 per month can afford to consume a fair quantity of brandy which is being imported from Germany and the Continent bearing labels expressly intended to impress the mill workers. These are generally more harmful than pure toddy, but the baneful effects of these drinks and other vices in which the mill workers indulge, despite the warnings and advice of welfare workers and other well-wishers, indicate the lack of influence and control the labour leaders have over them.

Bribery and Blackmail.

As a matter of fact some of the labour leaders have recently been openly pointing not only to their own difficulties with the workpeople but to the waning influence of the mill jobbers and *Naikins* over the male and female workers who have learnt to protest against the blackmail and bribery levied by the former not only for securing a job but also for maintaining it. The earnings of the jobber and the *Naikin* (female supervisor) may be three or four times in excess of the pay of the individual male and female workers and yet the latter have to submit more or less to the extortions of the former for fear of dismissal or fines. Thus the new arrival from up-country has by no means an easy entry in the mill as a paid hand. He has of course to learn the work and act as a *budli* or substitute or a mere helper to a friend or relation in the department.

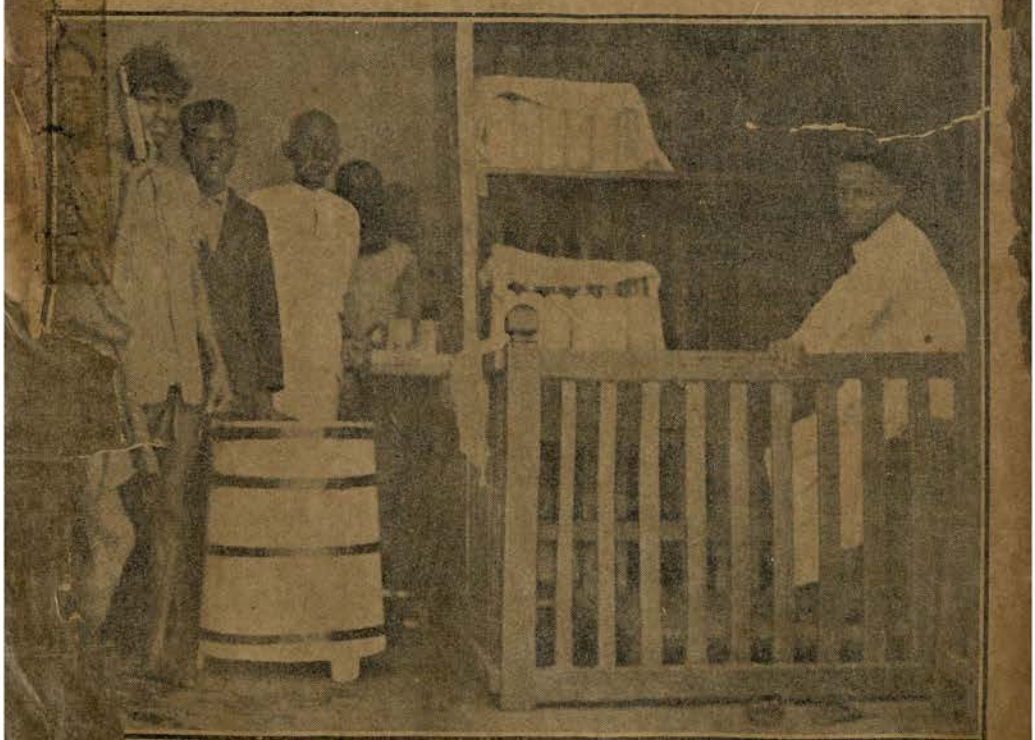


Recent Arrivals from the Villages. [Photo Co.

The advantages of Gymnasium Exercise in the Welfare Work Centres. [Photo by Y.M.C.A.

COTTON MILL OPERATIVES IN BOMBAY.

Mill Hands having Tea after Work.



The Toddy Shop in the Mill Area.

TEA *vs.* TODDY.

[Photos Copyright.

he first place he will have to pay the jobber on admission and then the Time-per or Muster Clerk who keeps him in suspense till he pays him for his "couble" in entering his name on the *budli* or substitute register. The bationer will thus be in debt before he can be sure of regular employment and n realises the difficulty and time required in getting the big wage in the mill mpared with his meagre earnings in the village. And despite these hardships nd worries he will readily go on strike or absent himself and neglect his work with a coolness or indifference that has amazed the most ardent well-wishers of the labouring classes.

Nearly 370,000 people are employed in the mill industry in India and four times that number, *i.e.*, nearly 1½ million souls, are directly dependent on the industry for their daily bread. In Bombay City and Island the number of persons directly employed in the mill industry is 150,600 which means that, including dependents, more than half of the inhabitants of this city are absolutely dependent on the industry for their livelihood.

The Male Workers.

The workmen are drawn to the city by the attraction of better pay better surroundings than in the fields under a tropical sun or under eq tropical rains. These people have an interest more or less in the property vated by their families and relatives in the villages and many of them send m regularly from their earnings to maintain this interest. Prior to 1909 their ear in the field amounted to 2 to 3 annas per day, while in the mill a man was from 6 to 8 annas, and since 1910 the wages have increased to the extent of 1 cent. in addition to bonus and other allowances. The bond to the land is quently becoming weaker, and a new generation is growing up, born of mill wo and earning at the age of 14 years Rs. 20 to 25 per month in the mill. This ge tion knows nothing of field work, and are less fit for it physically than the par so the children will grow up as millhands, without however being bound t work for life as the Lancashire man is obliged to do. The latter, in spite that the British Provident Societies can do for him, lives practically in th of the alternative of "work or starve," while the Indian mill hand frequ and for long periods, does neither, and seems little the worse for it. His sa if any, are usually invested in jewellery or clothing for the sake of effect, th the majority spend away their surplus in drink. Strikes, therefore, alth they may be on a large scale, can never last long. The millhand, however, und stands the way to boycott a mill or several mills at once when incited by interest parties, causing inconvenience to the millowners, while his constitutional aver to routine and punctuality stand constantly in the way of his personal imp ment in factory work. Fines of double pay for every day of unauthorised a does not prevent him from taking a holiday whenever he likes, and exp is treated with the gravity of perfect indifference.

Whatever class of work a mangets used to in a mill he keeps to it for the of his mill life. He learns just as little as will ensure his pay, and there impro ment ends; it is thus that despite the efforts of Government and the well-wish of the labouring classes, the Bombay millhand is still illiterate as only abo 5 per cent. of the total population of factory workers can read and write th own language. In the hands of the majority of the millhands the machine deteriorate more rapidly than in those of the Lancashire or Japanese operati The millhands in Bombay are seldom over 40 years of age, and are rarely over 50.

Judged from the Lancashire standpoint, the Indian millhand migh very much more serious adversary if he could bring the energy of the operative to bear on his work. He has not the power of concentration

...e is slo...
...day is due, over...
...leading him into a better sty...
...or in vice, so that his absolute necessities ...
...as before.

...nd can develop the steady habits and address of ...
...workman, it is possible that a large proportion of the ...
...ould be utilised in the local factories for finer counts and

...rking Capacity of the Bombay Millhand.

...l hand is much below the Lancashire operative in his capacity ...ance, in India, a man attends to 180 to 200 spindles spinning ... while a girl in Lancashire would look after 500 to 600 ...mbay adult weaver can attend to 2 looms while in Lancashire ... 4 to 5 looms. In an up-to-date weaving mill in Bombay 100 ...d require 87 operatives including winding, warping, sizing, calender-...ding and baling and the share of the power house and mechanic shop.

... ring frames with 360 to 400 spindles each, and 5" to 7" lift, a competent ...r in Bombay can look after 160 to 180 spindles while an experienced ...r will mind 2 looms at the same time. The number of operatives ...ed for 1,000 spindles will be 33 up to and including reeling.

The millowners point out that by reducing the hours of work from 12 to 10 ...y the production in the spinning mills has gone down to about 16 per cent. ...in the weaving mills it has been reduced approximately from 10 to 12 per ... or an all-round reduction of 13 per cent.

An average spinner in Bombay earns about Rs. 29 per month by winding ...spindles while a weaver who looks after 2 looms gets Rs. 42 per month.

There are no prospects in the near future of improving the Bombay mill ...perative so that he may attend to a larger number of spindles and looms. Bonus for regular attendance had been tried but had no influence on the stayaway habit of the workpeople. If a permanent population of mill workers can be secured then their attendance and skill might undergo a change for the better.

Budlis or substitutes have to be kept to fill up vacancies caused by wholesale absenteeism, which is detrimental to good work, and inefficiency is also the result when a spinner has to look after two sides during the absence of his neighbour. Even the introduction of a Provident Fund to ensure a continuity of skilled labour will not help the situation as the mill workers are habitually a migratory people.

The millhand stays away when he likes and, according to the *Labour Gazette*, the absenteeism for the month of June 1926 was 11.13 per cent. in Bombay against 2.54 per cent. in Ahmedabad.

The reduction in the hours of work has increased the labour cost per pound of cloth by nearly 13 per cent. or an addition of approximately 5.2 pies per pound in the cost of production, but the operatives' standard of living has not ...proved despite increased wages and though they spend more money per ...nth on themselves than their caste people and other labourers outside of ... mills.

... wages, etc., on this page and page 327 are taken from the Millowne... ...ence before the Textile Tariff Board in August 1926.

A MAHOMEDAN WEAVER.

Mr. M. M. KOWLENKER.

THE HINDOOSTAN MILL STAFF—1909.

Second row on chairs—(Left to right) Mr. Dixon (Police Officer), Mr. Madhowji Bhanji, Store-keep
Mr. P. B. Shroff, Engineer; Mr. F. Dixon, Erector; Mr. J. H. Duckworth, Spinning Master; Mr.
Erector; Mr. Anandrao Pandurang, Spinning Clerk; Mr. Mukandrao M. Kowlenker, Ma
The third and fourth rows, standing, include the jobbers and their assistants, several of wh
ervice of the Hindoostan Mills from their boyhood and till their retirement or de
owlenker joined the service in 1888 as a Reeling Clerk and has now risen to be an ass

A Jewess Supervisor over Female Workers.

JACOB SASSOON MILLS : JOBBERS AND CLERKS.

ft to right:—Messrs. Sk. Mohammad Sk. Kasam (Boiler Sarang) ; David Jacob
sistant Timekeep Bhiwa Shiwa (Frame Head

illhands have a general aversion for night work and t
conditions in Bombay during the different seasons cann
introduction of double shifts and night work which is further re
cable by the provisions in the Factory Act which prohibits th
women after sunset.

The Mill Jobber.

In the early days of the mill industry in Bombay the
from the more intelligent class of Maratha and Deccani wo
only stronger in physique but could tackle and work the m
skill and efficiency compared with the general body of cultiva
who came from the Ratnagiri or Konkan districts. The
and their Parsi assistants found the jobbers useful in exacti
hands who would put up meekly with the threats and abu
was familiar with their vagaries and skulking habits. They
corporal punishment which the jobbers had to resort to with th
of the workpeople who did not mind being useful to him by m
and limbs in a corner of the factory and giving him other relief when
indisposed. Thus the jobber proved useful to the millowner not only in kee
the machinery in working order but in extracting work from the operatives and
maintaining the production up to the required standard. As the jobber's earnings
were on the outturn he had to maintain the full complement of hands in his depart-
ment, and if he could not muster the required number from the city he indented
for them from his native village. Similarly when an extension of machinery in
the mill was completed and a large number of hands were required the jobber
sailed for his village in the ferry-boat and brought out a consignment of men who
had never been to Bombay or to any other town or city. But while the new
arrivals were willing to work, their physique and stamina were not suited t
steady attention and work in a factory and a far larger number of hands w
quired than the machines were designed for.

Female Labour.

stom and social habit have separated male and female labour in the mills, and
only work at reeling and winding in a separate department, with a forewoman
ge. The female workers are independent and prompt to take offence, and if
physical appearance and dress on a holiday may be taken as an index of
condition, they cannot be said to suffer from the effects of poverty or over-
k. Their domestic life is simplicity itself. A short-sleeved jacket is thei
y sewn garment, and they may be completely clothed a in *sari*, which they
p about them in the approved style and wear with a grace that is natural to
m. Their children up to the age of 5 or 6 go stark naked, and the furniture in
r houses consists of a box or two to hold spare clothes and sundry ornaments
oy or rough bed-frame covered with coir yarn netting, and a few
utensils of metal or earthenware. They eat very little meat and fe
ir fingers sitting on the ground, and with few exceptions abstain e
oxicating drinks. The men are, however, inclined to waste their s
in drink and other vices and a family may be continuously i
a fairly good income.

Wages and Strikes.

bstantial increase in wages was given to the mill operatives in B
e war period 1914—19 and also the post-war period and althoug
p in the cost of living from the year 1921 and the margin
diminishing after 1923, no reduction in the wages was m
the depression in the mill industry became more acut

September 15th 1925 and ending soon after the suspension of the ... Duty, on December 1st 1925, when the former wages were restored. It ... d that the Bombay millowners as a body had never agreed to ... ges during the existence of their Association since 1874, the general ... tion in 1925 being the first of its kind.

... wages in the Bombay mills have increased to a greater extent tha... cost of living and are in some instances two and a half times the pre... Labour charges in the Bombay mills constitute the largest item i... cost of manufacture.

Through the courtesy of one of its members the Millowners' Associa... has been able to prepare a comparative statement of the wages paid in ... chief occupations in a cotton spinning and weaving mill, from 1910 to ... which may be taken as typical for the whole of the Bombay mill indu... These figures are given below. In the lower table the 1910 wage has been ... given the index number 100 in each case for convenience in estimating the ... the increases in wages.

...parative Statement of Wages per month : Standard Muster.

	April 1910.	April 1913.	Janry. 1918.	Janry. 1919.	Febry. 1920.	Nov. 1920.	May 1921.	Apri... 1923.
				(*Excluding Annuals.*)				
	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs. a.	Rs.
...	12 0	14 0	17 4	20 4	23 4	25 8	25 8	29
...	9 0	11 8	15 0	17 8	20 0	22 0	23 12	27
...	18 0	19 9	24 0	28 8	36 12	37 12	37 12	37
...	13 0	15 0	20 0	23 8	27 0	29 12	29 12	2...
...	12 8	12 8	14 8	16 12	19 4	21 4	21 4	
...	22 0	22 0	27 8	32 0	41 8	42 12	47 12	
...	14 6	14 0	17 4	20 4	23 4	25 8	25 8	
...nding extra allowance :—			15%	35%	55% & 75%	70% & 80%	70% & 80%	

... per month Showing the Level as Co... with 19...—100

		(*Excluding Annual Bonus.*)				
		April 1913.	Jan. 1918.	Jan. 1919.	Feb. 1920.	Nov. 1920.
Ten...	10...	117	144	169	194	212
Ten...	100	128	167	194	222	244
Tenters..	100	109	133	158	204	210
...ide boys	100	115	154	181	208	229
...	100	100	116	134	154	170
...	100	100	125	145	189	194
...xtra allowance :—		15%	35%	55 & 75%	70 & 80	

Progress of Mill Labour : 1905 to 1925.

Bombay City.*		All India & Bombay City.*	
Average No. of Hands employed daily.	Years.	Mills.	Average No. of Hands employed daily.
92,924	1905	197	195,277
100,798	1906	217	208,616
[illegible]	1907	224	[illegible]
[illegible]	1908	241	[illegible]
[illegible]	1909	259	[illegible]
104,559	1910	263	[illegible]
104,500	1911	263	[illegible]
109,691	1912	268	[illegible]
110,033	1913	272	[illegible]
109,860	1914	271	[illegible]
111,924	1915	272	[illegible]
118,303	1916	266	[illegible]
125,713	1917	[illegible]	[illegible]
[illegible]	1918	[illegible]	[illegible]
[illegible]	1919	[illegible]	[illegible]
[illegible]	1920	[illegible]	[illegible]
[illegible]	1921	[illegible]	[illegible]
149,224	1922	298	[illegible]
148,771	1923	333	[illegible]
148,414	1924	[illegible]96	[illegible]
153,009	1925	337	[illegible]

* Includes Karla.

Bombay Mills : Classes of Yarn and Piece-goods Manufactured.

THE following particulars* of the variety of yarn spun and cloths woven at the different mills in Bombay should prove of practical utility not only to purchasers and consumers but also to manufacturers and others interested in the output of our local factories.

It will be seen that the counts of yarns spun range on the average from 3s to 40s, very few mills going in for finer counts as far as 60s. As regards the variety of cloth, a very wide selection has been made so as to cover the requirements not only of the Indian market but in other regions where Indian goods are sold, particularly Africa and the Near East.

Counts of Yarn Spun by the Bombay Mills.

Grey.

Mills.	*Counts.*
Apollo Mills	3–30
Assur Veerjee	3–40
ut ry	2–6½
aba Land	10–30
rla	6–20
cent	6–32
n	10–34
unbhoy	4–34
d	3–36
n	4–22
iond	10½–20½
rd Sassoon	4–36
Sassoon United	2–36
instone	3–32
eror Edward	10–30
ulbhoy	10–34
amjee Petit	8½–28
be	6½–20½
ndoostan	11½–32
dian Mfg.	18–40
amshed	6–40
ubilee Mills	10–50
astoorchand Mills	1–60
hatau Makanji	6½–60
ohinoor	3, 12, 14½ & 22½
Madhowji Dharamsi	6–40
Manockjee Petit	6–24
Meyer Sassoon	4–36
Moon Mills	4–30
Morarjee Goculdas	4–50
New City of Bombay	10–24
New Great Eastern	10–30
Pabaney	4–32
Pearl Mills	12–30
Phœnix Mills	4–30

Grey.—*Contd.*

Mills.	*Counts.*
Sassoon	6–32
Sir Shapurji Broacha	2–40
Standard Mills	6½, 10 & 20
Svadeshi Mills	4–14
Tata Mills	6½–8½
Union Mills	6½–32
Victoria Mills	20–40
Western India	10–30

Bleached.

Dawn Mills	
E. D. Sassoon United ..	3–40
Madhowji Dharamsi ..	
Sir Shapurji Broacha	

Dyed.

F ed	
si	6
roacha	6–40

Folded.

s	3–30
y	4–34
David	3–36
Dawn	4–22
Edward Sassoon	4–36
E. D. Sassoon United	2–36
New City of Bombay	10–24
Phœnix Mills	2–30
Sir Shapurji Broacha	6–40
Svadeshi	2–10

*Abstracted from the Bombay Millowners' Association Report.

Piece-goods Manufactured by the Bombay Mills.

(1) GREY CLOTH.

Bags.—Colaba Land, Crescent, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Globe, Meyer Sassoon, New Great Eastern, Sir Shapurji Broacha.

Blankets.—Century, Colaba Land, David, E. D. Sassoon United, Kastoorchand.

Canvas.—Century, Colaba Land, Crescent, Currimbhoy, Pabaney, E. D. Sassoon United, Globe, Khatau Makanji, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Sir Shapurji Broacha.

Chaddars.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, David, Pabaney, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Fazulbhoy, Framji Petit, Globe, Hindoostan, Indian Mfg., Jamshed, Jubilee, Kastoorchand, Khatau Makanji, Madhowji Dharamsi, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Victoria, Western India.

Chaddars, Twilled, with Coloured Borders.—Assur Veerjee, Century, Colaba Land, Coorla, David, Diamond, Edward Sassoon, E. D. Sassoon United, Globe, Jamshed, Kastoorchand, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Western India.

Chaddars, Nakhi Bordered.—Century, Colaba Land, Coorla, Crescent, Crown, David, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Framjee Petit, Globe, Hindoostan, Madhowjee Dharamsi, Manockjee Petit, Kohinoor, Morarjee Goculdas, New Great Eastern, Meyer Sassoon, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union, Victoria, Western India.

Cholas.—Assur Veerjee, Colaba Land, Coorla, Crescent, David, Diamond, Pabaney, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Globe, Jubilee, Kastoorchand, Khatau Makanji, Kohinoor, Meyer Sassoon, Morarjee Goculdas, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union, Victoria.

Cholas, Majithia.—Colaba Land, Diamond, Kohinoor, Morarjee Goculdas, New Great Eastern, Sir Shapurji Broacha.

Dhooties.—Assur Veerjee, Century, Coorla, Crescent, Crown, Currimbhoy, David, Pabaney, Edward Sassoon, E. D. Sassoon United, Elphinstone, Fazulbhoy, Framjee Petit, Globe, Indian Mfg., Jubilee, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Western India.

Dhooties, Dobby Bordered.—Assur Veerjee, Century, Coorla, Crescent, Colaba Land, Currimbhoy, David, Elphinstone, Edward Sassoon, Pabaney, E. D. Sassoon United, Fazulbhoy, Globe, Indian Mfg., Jamshed, Kastoorchand, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union, Victoria, Western India.

Dhooties, Nakhi.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, David, Diamond, Pabaney, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Framjee Petit, Globe, Indian Mfg., Jubilee, Kastoorchand, Khatau Makanji, Madhowji Dharamsi, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, New Kaiser-i-Hind, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Victoria, Western India.

Dhooties, Patti.—Assur Veerjee, Century, Colaba Land, Coorla, Crown, Currimbhoy, David, Diamond, Pabaney, Edward Sassoon, E. D. Sassoon United, Elphinstone, Fazulbhoy, Globe, Indian Mfg., Jamshed, Jubilee, Kastoorchand, Khatau Makanji, Madhowji Dharamsi, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Victoria, Western India.

Dobby Cloth.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, David, Pabaney, Edward Sassoon, E. D. Sassoon United, Elphinstone, Fazulbhoy, Globe, Jamshed, Kastoorchand, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Western India.

Domestic, Salitha or Mexicans.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, David, Diamond, Pabaney, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Fazulbhoy, Framji Petit, Globe, Hindoostan, Jamshed, Kastoorchand, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Western India.

Doriad, Plain.—Assur Veerjee, Century, Colaba Land, Crescent, Currimbhoy, Pabaney, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Globe, Kastoorchand, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Dosuti.—Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Framjee Petit, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Drill.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, David, Diamond, Pabaney, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Elphinstone, Fazulbhoy, Framjee Petit, Globe, Hindoostan, Indian Mfg., Jamshed, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Manockjee Petit, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Western India.

Duster Cloth.—Century, Colaba Land, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Kastoorchand, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union.

Feta.—Globe, Morarjee Goculdas, Sir Shapurji Broacha, Standard, Tata.

Handkerchiefs.—Jamshed, Madhowji Dharamsi, Svadeshi, Tata.

Jaconet.—Century, Crown, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Globe, Hindoostan, Indian Mfg., Kohinoor, Meyer Sassoon, Morarjee Goculdas, Planet, Phœnix, Standard, Svadeshi, Tata.

Khadi.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, David, Pabaney, Edward Sassoon, E. D. Sassoon United, Elphinstone, Fazulbhoy, Framjee Petit, Hindoostan, Indian Mfg., Jamshed, Jubilee, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee, New Great Eastern, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Western India.

Leheria.—Assur Veerjee, Edward Sassoon, E. D. Sassoon United, Pabaney, Fazulbhoy, Globe, Kastoorchand, Kohinoor, Meyer Sassoon, Pearl, Sir Shapurji Broacha, Union.

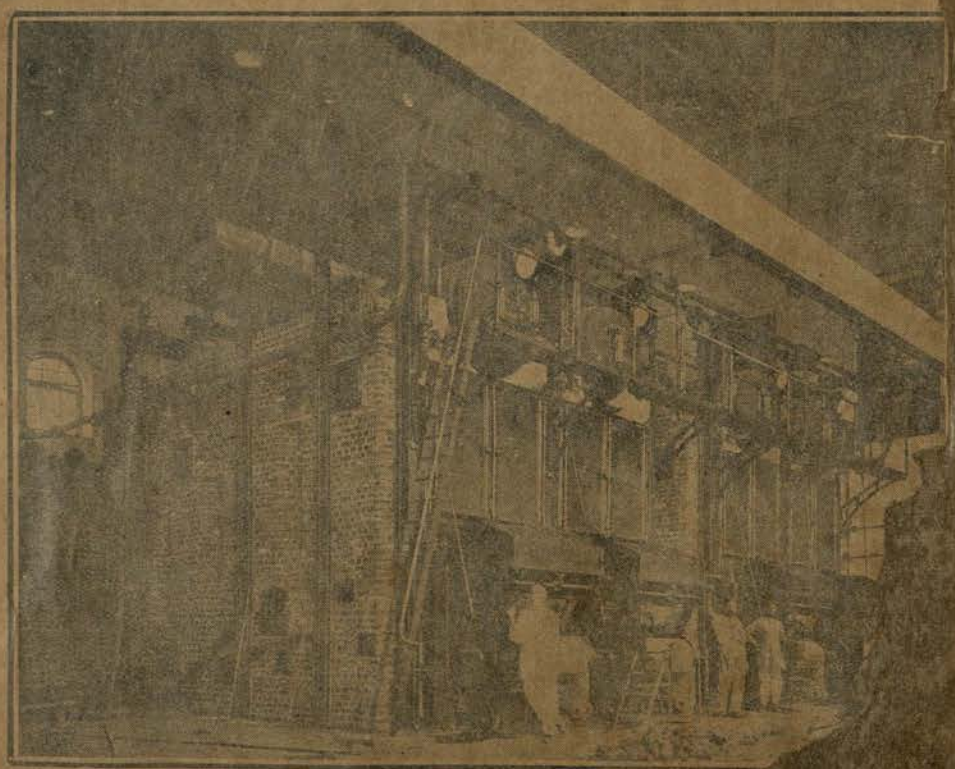
Lepper.—Century, Colaba Land, Coorla, Crown, David, Diamond, Edward Sassoon, E. D. Sassoon United, Elphinstone, Framjee Petit, Globe, Hindoostan, Kastoorchand, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union, Western India.

Linings.—Colaba Land, New Great Eastern, Sir Shapurji Broacha.

Long Cloth.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, Diamond, Pabaney, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor , Fazulbhoy, Framjee Petit, Globe, Hindoostan, Indian Mfg., Jamshed, Jubilee, chand, Kohinoor, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, New Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Western India.

Cloth, Fancy Bordered.—Colaba Land, Currimbhoy, Globe, Kastoorchand, Morarjee eat Eastern, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union.

PURDESHI WORKMEN IN THE BLOW-ROOM. [Copyright.



WORKMEN AND FITTERS IN THE BOILER-HOUSE.

Long Cloth, Light Weight.—Assur Veerjee, Century, Colaba Land, Crescent, Crown, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Framjee Petit, Globe, Hindoostan, Indian Mfg., Jamshed, Jubilee, Kastoorchand, Kohinoor, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Victoria, Western India.

Long Cloth, Nominal Weight.—Century, Colaba Land, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Globe, Indian Mfg., Jamshed, Kastoorchand, Kohinoor, Meyer Sassoon, New Great Eastern, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union.

Madras Cloth.—Colaba Land, Crescent, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Globe, Kastoorchand, Madhowji Dharamsi, Meyer Sassoon, New Great Eastern, Pearl, Sir Shapurji Broacha, Standard, Tata, Union.

Nainsook.—Century, Edward Sassoon, E. D. Sassoon United, Elphinstone, Kastoorchand, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Napkins.—Century, Coorla, Crescent, Crown, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Fazulbhoy, Globe, Kastoorchand, Madhowji Dharamsi, Manockji Petit, Meyer Sassoon, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Pugri Cloth.—Century, Colaba Land, Crescent, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Globe, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, New Great Eastern, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union.

Sail Cloth.—Colaba Land, Crescent, Currimbhoy, Emperor Edward, Manockjee Petit, Madhowji Dharamsi, Meyer Sassoon, New Great Eastern, Sassoon, Sir Shapurji Broacha, Union.

Saris.—Century, Colaba Land, Coorla, Crescent, David, Pabaney, Edward Sassoon, E. D. Sassoon United, Elphinstone, Fazulbhoy, Globe, Jamshed, Kastoorchand, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, New Great Eastern, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union.

Sheetings.—Assur Veerjee, Century, Colaba Land, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Framjee Petit, Globe, Jamshed, Kastoorchand, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, New Kaiser-i-Hind, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Shirtings.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, David, Diamond, Pabaney, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Elphinstone, Fazulbhoy, Framjee Petit, Globe, Indian Mfg., Kastoorchand, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Victoria, Western India.

Shirtings, Medium.—Century, Colaba Land, Coorla, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Globe, Kastoorchand, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union, Western India.

Shirtings, Calendered.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, David, Diamond, Edward Sassoon, E. D. Sassoon United, Elphinstone, Fazulbhoy, Framjee Petit, Globe, Indian Mfg., Jubilee, Kastoorchand, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union, Victoria, Western India.

Shirtings, Coloured Bordered.—Colaba Land, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Globe, Kastoorchand, Meyer Sassoon, New Great Eastern, Phœnix, Sir Shapurji Broacha, Standard, Union.

Shirting, Harvard.—Currimbhoy, E. D. Sassoon United.

Shirtings, Heavy.—Century, Colaba Land, Coorla, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Globe, Kastoorchand, Kohinoor, Manockjee Petit, Meyer Sassoon, New Great Eastern, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union.

Shirtings, Light.—Century, Colaba Land, Coorla, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Globe, Kastoorchand, Kohinoor, Manockjee Petit, Meyer Sassoon, New Great Eastern, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union, Victoria, Western India.

Shirtings, Twill.—Century, Colaba Land, Coorla, Crescent, Currimbhoy, Pabaney, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Globe, Hindoostan, Kastoorchand, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Shirtings, Unbleached.—Colaba Land, Coorla, Crescent, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Fazulbhoy, Globe, Kastoorchand, Kohinoor, Meyer Sassoon, New Great Eastern, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union, Western India.

T. Cloth.—Assur Veerjee, Century, Colaba Land, Crescent, Crown, Currimbhoy, David, Diamond, Elphinstone, Emperor Edward, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Framjee Petit, Globe, Jamshed, Kastoorchand, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Table Cloth.—Century, Colaba Land, Crescent, Pabaney, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Globe, Jamshed, Kastoorchand, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Tent Cloth.—Century, Colaba Land, Crescent, Crown, Currimbhoy, David, Pabaney, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Fazulbhoy, Framjee Petit, Globe, Jamshed, Kastoorchand, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union.

Towels.—Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, David, Pabaney, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Framjee Petit, Globe, Jamshed, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Towels, Army.—Century, Colaba Land, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Globe, Jamshed, Kastoorchand, Meyer Sassoon, New Great Eastern, Sir Shapurji Broacha, Standard, Union.

Zanzibar.—Century, Colaba Land, Coorla, Crescent, Crown, David, Diamond, Pabaney, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Fazulbhoy, Framjee Petit, Globe, Indian Mfg., Jamshed, Kastoorchand, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Union, Western India.

BLEACHED CLOTH.

Checks.—Assur Veerjee, Century, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Globe, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, Phœnix, Standard, Svadeshi, Tata, Union.

Chaddars.—David, Edward Sassoon, E. D. Sassoon United, Jamshed, Kastoorchand, Khatau Makanji, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Dhooties.—Assur Veerjee, Edward Sassoon, E. D. Sassoon United, Globe, Indian Mfg., Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, Pearl, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Doria.—Assur Veerjee, Century, Edward Sassoon, E. D. Sassoon United, Globe, Indian Mfg., Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

SPINNERS AT THE SELF-ACTING MULE. [Copyright.

Doria, Plain.—Assur Veerjee, Century, Edward Sassoon, E. D. Sassoon United, Globe, Indian Mfg., Kastoorchand Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Doria, Striped.—Assur Veerjee, Century, Edward Sassoon, E. D. Sassoon United, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Dosuti.—David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Globe, Khatau Makanji, Kastoorchand, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Drills.—Assur Veerjee, Century, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Globe, Jamshed, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Fancy Cloth.—Assur Veerjee, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Jamshed, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Union.

Feta.—Indian Mfg., Khatau Makanji, Morarjee Goculdas, Sir Shapurji Broacha.

Handkerchiefs.—Jamshed, Kastoorchand, Khatau Makanji, Madhowji Dharamsi, Standard, Svadeshi, Tata, Union.

Handkerchiefs, Check.—Crescent, E. D. Sassoon United, Khatau Makanji Madhowji Dharamsi, Standard, Svadeshi, Tata, Union.

Khadi.—Century, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Svadeshi, Tata, Union.

Linings.—Sir Shapurji Broacha.

Long Cloth.—Century, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Long Cloth, Jiggered.—Edward Sassoon, E. D. Sassoon United, Globe, Khatau Makanji Kohinoor, Meyer Sassoon, Morarjee Goculdas, New Kaiser-i-Hind, Planet.

Nainsook.—Edward Sassoon, E. D. Sassoon United, Kastoorchand, Khatau Makanji Kohinoor, Madhowji Dharamsi, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard Svadeshi, Union.

Napkins.—Century, Crescent, David, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Kastoorchand, Khatau Makanji, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon Morarjee Goculdas, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Pugri Cloth.—Century, Edward Sassoon, E. D. Sassoon United, Khatau Makanji Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard Tata, Union.

Pique, Dobby Pattern.—David, Edward Sassoon, E. D. Sassoon United, Meyer Sassoon Sir Shapurji Broacha, Standard, Union.

Shirtings.—Century, David, Edward Sassoon, E. D. Sassoon United, Elphinstone Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Shirtings, Fancy.—David, Edward Sassoon, E. D. Sassoon United, Kastoorchand Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, Phœnix Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Shirtings, Harvard.—Kastoorchand, Sir Shapurji Broacha.

Shirtings, Striped.—David, Edward Sassoon, E. D. Sassoon United, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Shirtings, Twill.—Century, Edward Sassoon, E. D. Sassoon United, Globe, Indian Mfg., Kastoorchand, Khatau Makanji, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, New Kaiser-i-Hind, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Susi.—Assur Veerjee, Century, David, Edward Sassoon, E. D. Sassoon United, Indian Mfg., Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Table Cloth.—Century, Edward Sassoon, E. D. Sassoon United, Kastoorchand, Khatau Makanji Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union.

Towels.—Century, Crescent, David, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Towels, Army.—Edward Sassoon, E. D. Sassoon United, Kastoorchand, Meyer Sassoon.

Twills.—Century, Edward Sassoon, E. D. Sassoon United, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard Svadeshi, Tata, Union.

Twills, Striped.—Century, David, Edward Sassoon, E. D. Sassoon United, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Kaiser-i-Hind, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

(3) COLOURED GOODS.

Bed Ticks.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Jamshed, Kastoorchand, Khatau Makanji, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Blankets.—Century, Colaba Land, Crescent, David, Pabaney, E. D. Sassoon United, Jamshed, Kastoorchand, Madhowji Dharamsi, New Kaiser-i-Hind, Sir Shapurji Broacha.

Blankets, Army, and Twilled.—Century, Pabaney, Fazulbhoy, Kastoorchand, Madhowji Dharamsi, Pearl, Sir Shapurji Broacha.

Blankets, Grey.—Century, Colaba Land, David, Pabaney, E. D. Sassoon United, Kastoorchand, Pearl, Sir Shapurji Broacha.

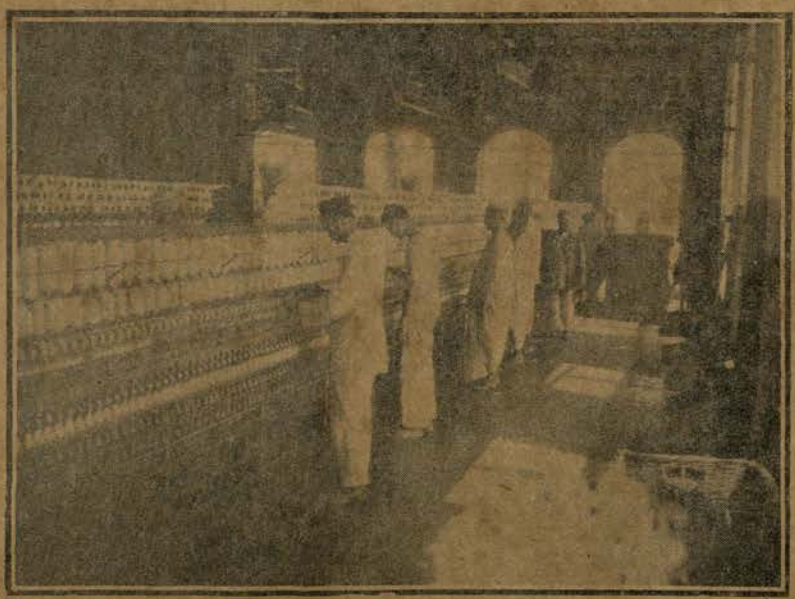
Canvas, Dyed.—Currimbhoy, E. D. Sassoon United, Khatau Makanji, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, Sir Shapurji Broacha, Standard.

Chaddars.—Assur Veerjee, Central, Colaba Land, Coorla, Crescent, Crown, Diamond, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, New Kaiser-i-Hind, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union.

Chaddars, Check.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, Diamond, E. D. Sassoon United, Elphinstone, Emperor Edward, Fazulbhoy, Globe, Hindoostan, Indian Mfg., Jamshed, Kastoorchand, Khatau Makanji, Kohinoor, Manockjee Petit, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Standard, Svadeshi, Tata, Union, Western India.

Chaddars, Twill.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Diamond, Pabaney, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Fazulbhoy, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Union, Western India.

THE RING FRAME: The Jobber or Overlooker.



THE RING FRAME: Adult Minders and Jobbers.

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Charsas.—Colaba Land, Crown, Globe, Khatau Makanji, Manockjee Petit, Morarjee Goculdas, New Great Eastern, Phœnix, Svadeshi, Tata.

Checks.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, David, E. D. Sassoon United, Elphinstone, Emperor Edward, Globe, Jamshed, Jubilee, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Western India.

Checks, Dobby.—Assur Veerjee, Century, Colaba Land, Crescent, Crown, David, Diamond, E. D. Sassoon United, Elphinstone, Globe, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Union, Western India.

Checks, Plain.—Assur Veerjee, Century, Colaba Land, Coorla, David, Diamond, E. D. Sassoon United, Elphinstone, Globe, Jamshed, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union, Western India.

Checks, Susi.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, Crown, David, E. D. Sassoon United, Elphinstone, Globe, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union.

Checks, Susi, English.—Century, Colaba Land, Crescent, David, E. D. Sassoon United, Elphinstone, Fazulbhoy, Globe, Khatau Makanji, Madhowji Dharamsi, Manockjee Petit, New Great Eastern, Phœnix, Sir Shapurji Broacha, Svadeshi.

Checks, Twill.—Assur Veerjee, Century, Colaba Land, Coorla, Crescent, David, E. D. Sassoon United, Elphinstone, Fazulbhoy, Globe, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Western India.

Checks, Zephyr and/or Thana Check.—Century, Colaba Land, Coorla, Crescent, David, E. D. Sassoon United, Elphinstone, Emperor Edward, Fazulbhoy, Framjee Petit, Globe, Mfg., Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Morarjee Goculdas, New Great Eastern, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata.

China Cloth.—Crescent, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Kastoorchand, Khatau Makanji, Meyer Sassoon, Sir Shapurji Broacha, Standard.

Chirdies, Dyed.—Morarjee Goculdas, Standard.

Cholas.—Colaba Land, Coorla, Crescent, David, Diamond, E. D. Sassoon United, Emperor Edward, Globe, Kastoorchand, Khatau Makanji, Morarjee Goculdas, New Great Eastern, New Kaiser-i-Hind, Pearl, Phœnix, Sassoon, Tata, Union.

Cholas, Check.—Assur Veerjee, Coorla, Crescent, Crown, David, Diamond, E. D. Sassoon United, Fazulbhoy, Globe, Jamshed, Jubilee, Khatau Makanji, Kohinoor, Morarjee Goculdas, Pearl, Phœnix, Tata, Western India.

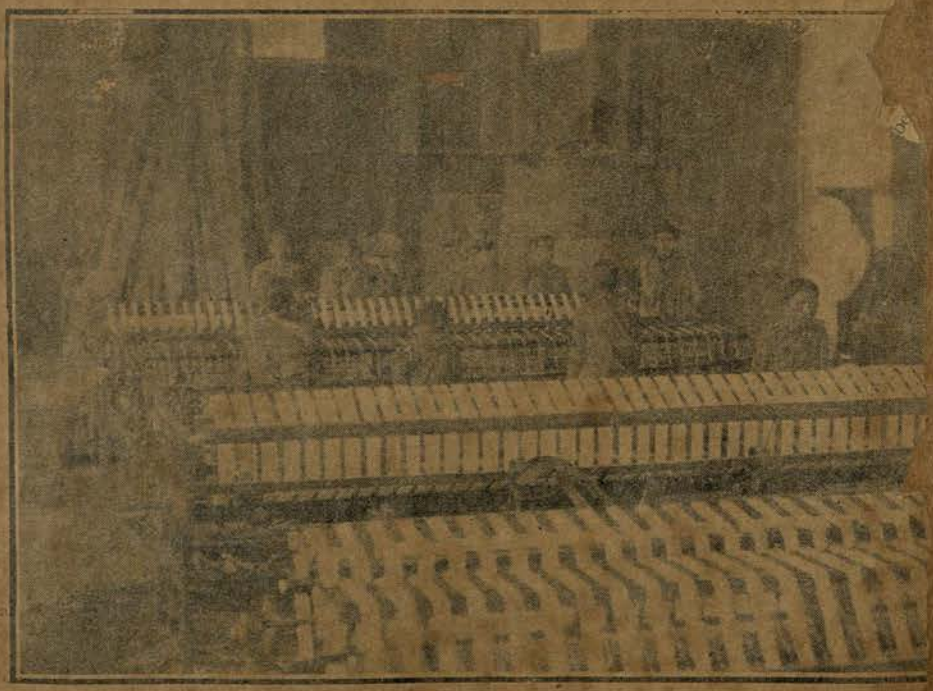
Cholas, Dobby.—Assur Veerjee, Colaba Land, Crescent, Diamond, Pabaney, Fazulbhoy, Globe, Khatau Makanji, Morarjee Goculdas, New Great Eastern, Phœnix.

Cholas, Duster.—Colaba Land, Crescent, E. D. Sassoon United, Fazulbhoy, New Great Eastern, Phœnix.

Coatings.—Colaba Land, Crescent, Edward Sassoon, E. D. Sassoon United, Elphinstone, Globe, Khatau Makanji, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata.

Coatings, English and/or Cashmere.—Currimbhoy, Pabaney, Edward Sassoon, E. D. Sassoon United, Elphinstone, Madhowji Dharamsi, Meyer Sassoon, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata.

Cotton, Dyed.—Currimbhoy, E. D. Sassoon United, Elphinstone, Framjee Petit, Globe, Jamshed, Manockjee Petit, Morarjee Goculdas, Pearl, Sir Shapurji Broacha, Svadeshi, Tata.



WOMEN REELERS AND WINDERS.

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WOMEN BOBBIN WINDERS.

Copyright

Drills, Black.—Coorla, Currimbhoy, E. D. Sassoon United, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union.

Drills, Blue.—Coorla, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi Meyer Sassoon, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard, Union.

Drills, Dobby.—Century, Colaba Land, Coorla, Currimbhoy, David, Diamond, Pabaney, E. D. Sassoon United, Edward Sassoon, Fazulbhoy, Globe, Hindoostan, Jamshed, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Morarjee Goculdas, New Great Eastern, Meyer Sassoon, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Union.

Drills, Dyed.—Century, Coorla, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Elphinstone, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Drills, Khaki.—Century, Coorla, Crescent, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Elphinstone, Framjee Petit, Globe, Indian Mfg., Jamshed, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard, Union.

Drills, Striped.—Century, Colaba Land, Coorla, Crescent, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Fazulbhoy, Framjee Petit, Globe, Hindoostan, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, New Kaiser-i-Hind, Pabaney, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union, Western India.

Drills, Zephyr and/or Thana Drills.—Colaba Land, Coorla, Crescent, Currimbhoy, David, Pabaney, Edward, Sassoon, E. D. Sassoon United, Emperor Edward, Globe, Indian Mfg., Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Phœnix, Sir Shapurji Broacha, Standard.

Dobby Cloth.—Colaba Land, Coorla, Crescent, Currimbhoy, Edward Sassoon, Sassoon United, Elphinstone, Globe, Indian Mfg., Jamshed, Kastoorchand, Khatau M Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union.

Gamchas, Check.—Century, Crescent, E. D. Sassoon United, Fazulbhoy, Khat Makanji, Manockjee Petit, Pearl, Sassoon, Sir Shapurji Broacha, Standard, Tata.

Holland.—Colaba Land, Coorla, Crescent, Currimbhoy, Diamond, Edward Sass E. D. Sassoon United, Fazulbhoy, Globe, Kastoorchand, Manockjee Petit, Meyer Sass Morarjee Goculdas, New Great Eastern, Pearl, Planet, Sir Shapurji Broacha, Svadeshi, T Union.

Hunting Cloth.—Colaba Land, Coorla, Crescent, Edward Sassoon, E. D. Sasso United, Emperor Edward, Globe, Khatau Makanji, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Sir Shapurji Broacha, Tata.

Linings.—Colaba Land, Currimbhoy, New Great Eastern, Sir Shapurji Broacha.

Long Cloth, Dyed.—Coorla, Currimbhoy, David, Diamond, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Globe, Indian Mfg., Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union.

Long Cloth, Khaki.—Currimbhoy, Diamond, Edward Sassoon, E. D. Sassoon United, Globe, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard, Union.

Loongees.—Assur Veerjee, Coorla, Crescent, Diamond, E. D. Sassoon United, Emperor Edward, Fazulbhoy, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Morarjee Goculdas, Pabaney, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Svadeshi, Tata, Union.

Madras Cloth.—Colaba Land, Crescent, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Globe, Kastoorchand, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pabaney, Pearl, Sir Shapurji Broacha, Standard, Tata, Union.

Prints.—Standard.

Pugri Cloth, Khaki.—Century, Edward Sassoon, E. D. Sassoon United, Khatau Makanji, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, Pabaney, Phœnix, Sir Shapurji Broacha, Union.

Saris.—Assur Veerjee, Colaba Land, Coorla, Crescent, Crown, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Fazulbhoy, Globe, Jamshed, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, New Kaiser-i-Hind, Sassoon, Sir Shapurji Broacha, Standard, Union.

Shawls, Dyed.—Currimbhoy, E. D. Sassoon United, Edward Sassoon, Framjee Petit, Indian Mfg., Kastoorchand, Khatau Makanji, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, Phœnix, Standard, Svadeshi, Tata.

Shirtings, Dyed.—Coorla, Currimbhoy, Diamond, E. D. Sassoon United, Framjee Petit, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Morarjee Goculdas, Pearl, Phœnix, Sir Shapurji Broacha, Standard, Tata, Union, Victoria.

Shirtings, Grey, Figured and/or Domety.—Century, Colaba Land, Crescent, Currimbhoy, Diamond, Fazulbhoy, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Madhowji Dharamsi, New Great Eastern, Phœnix, Sir Shapurji Broacha, Standard, Union.

Shirtings, Harvard.—Currimbhoy, Sir Shapurji Broacha.

Shirtings, Twilled Check.—Century, Colaba Land, Coorla, Crescent, Currimbhoy, Diamond, E. D. Sassoon United, Fazulbhoy, Khatau Makanji, Madhowji Dharamsi, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard, Union.

Shirtings, Twilled Khaki.—Century, Currimbhoy, Diamond, Edward Sassoon, E. D. Sassoon United, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Phœnix, Sir Shapurji Broacha, Standard, Union.

Shirtings, Twilled Coloured Stripe.—Century, Colaba Land, Crescent, Currimbhoy, Diamond, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Globe, Kastoorchand, Khandesh, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Pabaney, Phœnix, Sholapur, Sir Shapurji Broacha, Standard, Tata, Union.

Susi, Dobby.—Century, Colaba Land, Coorla, Crescent, Currimbhoy, David, Diamond, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Globe, Jamshed, Kastoorchand, Khatau Makanji, Madhowji Dharamsi, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union.

Susi, D.P.S.—Crescent, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Fazulbhoy, Kastoorchand, Khatau Makanji, Madhowji Dharamsi, Meyer Sassoon, Pabaney, Phœnix, Sir Shapurji Broacha, Standard, Tata.

Susi, Dyed.—Coorla, Currimbhoy, Diamond, Edward Sassoon, E. D. Sassoon United, Globe, Jamshed, Khatau Makanji, Kohinoor, Madhowji Dharamsi, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, Phœnix, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Victoria.

Susi, Ordinary Coloured Striped.—Century, Colaba Land, Coorla, Crescent, Crown, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Fazulbhoy, Framjee Petit, Globe, Kastoorchand, Khatau Makanji, Kohinoor, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pabaney, Pearl, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Svadeshi, Tata, Union, Victoria.

Susi, Zephyr and/or Thana Susi.—Colaba Land, Coorla, Crescent, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Emperor Edward, Framjee Petit, Globe, Kastoorchand, Khatau Makanji, Madhowji Dharamsi, Kohinoor, Meyer Sassoon, Morarjee Goculdas, New Great Eastern, Pabaney, Phœnix, Sassoon, Sir Shapurji Broacha, Standard, Tata, Union.

Table Cloth and/or Counterpanes.—Crescent, E. D. Sassoon United, Globe, Indian Mfg., Manockjee Petit, Phœnix, Standard, Sir Shapurji Broacha, Tata, Union.

Thana Cloth.—Assur, Century, Colaba Land, Coorla, Crescent, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Globe, Kastoorchand, Khatau, Madhowji, Manockjee Petit, Meyer Sassoon, New Great Eastern, Phœnix, Sassoon, Sir Shapurji, Standard, Svadeshi, Tata, Union.

Tinted Cloth.—Century, Edward Sassoon, E. D. Sassoon United, Kastoorchand, Madhowji, Manockjee Petit, Meyer Sassoon, Morarjee Goculdas, Phœnix, Sir Shapurji, Standard, Tata, Union.

Trouserings.—Colaba Land, Crescent, Edward Sassoon, E. D. Sassoon United, Khatau, Madhowji, Manockjee Petit, Meyer Sassoon, New Great Eastern, Phœnix, Sir Shapurji, Standard, Svadeshi Tata.

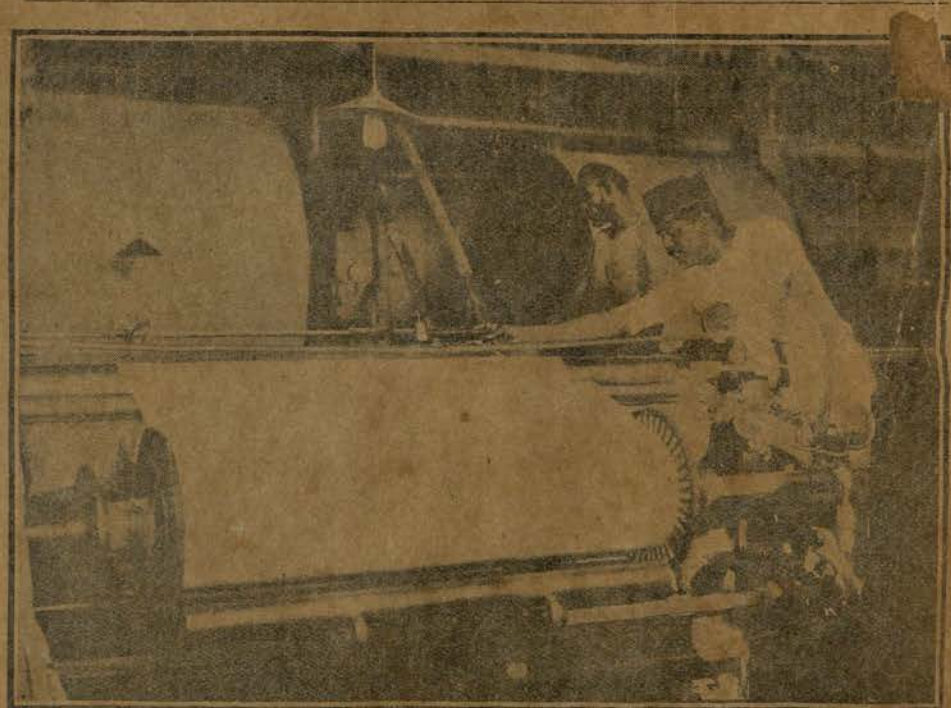
Tussore, Imitation.—Edward Sassoon, E. D. Sassoon United, Khatau, Madhowji, Manockjee Petit, Meyer Sassoon, Morarjee, Phœnix, Sir Shapurji, Svadeshi.

Twills.—Century, Colaba Land, Coorla, Crown, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Globe, Indian Mfg., Kastoorchand, Khatau, Kohinoor, Meyer Sassoon, Manockjee Petit, Morarjee, New Great Eastern, Pearl, Phœnix, Sir Shapurji, Standard, Tata, Union.

Twills, Striped.—Century, Colaba Land, Coorla, Crescent, Currimbhoy, David, Edward Sassoon, E. D. Sassoon United, Elphinstone, Globe, Kastoorchand, Khatau, Madhowji, Meyer Sassoon, Morarjee, New Great Eastern, Pearl, Phœnix, Sassoon, Sir Shapurji, Standard, Svadeshi, Tata, Union.

Twills, Zephyr and/or Thana Twill.—Colaba Land, Coorla, Crescent, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Framjee Petit, Globe, Khatau, Madhowji, Meyer Sassoon, New Great Eastern, Phœnix, Sir Shapurji, Standard, Union.

Zephyrs.—Century, Colaba Land, Coorla, Crescent, Currimbhoy, Edward Sassoon, E. D. Sassoon United, Emperor Edward, Framjee Petit, Globe, Kastoorchand, Khatau, Kohinoor, Madhowji, Manockjee Petit, Meyer Sassoon, Morarjee, New Great Eastern, Phœnix, Sir Shapurji, Standard, Tata, Union.



THE SIZING MACHINE: MARATHA AND MAHOMEDAN MINDERS. (Copyright)

(*For Weaving Shed, see page 196.*)

Manufacturing Processes and Charges.

Spinning and Weaving.

It will be seen from the preceding pages that a wide range of piecegoods and fabrics are being manufactured by the cotton mills in Bombay, the counts of yarn ranging from 4s to 40s in the majority of the factories. The finer counts are also being spun as far as 60s by certain mills from imported Egyptian yarn while artificial silk yarn has been imported in recent years in increasing quantities. Spinning is done mostly on the ring frames, the mules being restricted to about 30 factories out of the 82 which have been erected in Bombay city including Kurla. Mule spinning was carried on in pre-war years on a larger scale but the total in 1925 was 440,000 mule spindles and 3,000,000 ring spindles. A very small proportion of the mills restrict their operations to the weaving of plain cloth only, while the majority go in for bleaching, finishing and dyeing.

The Power Supply.

Until the introduction of the electric drive in 1918 from the Works of the Tata Hydro-Electric Power Supply Co., Ltd., the local cotton mills were driven by steam engines of the compound-condensing type, ranging from 800 to 3,000 H.P., the largest being erected at the Jacob Sassoon Mills and the Maneckji Petit Mills. The Diesel engines, however, began to find favour before the electric power supply could be made available in the city and several were installed for direct shaft driving or for generating the current for the electric motors. The Diesel engine and the steam drive are still being used in about a dozen factories, the rest being driven electrically by current supplied by the Tata Hydro-Electric and the Andhra Valley Power Supply Companies.

Sprinklers and Humidifiers.

With few exceptions the mills are fitted with the most modern types of sprinklers and fire appliances which are kept in efficient condition under the supervision of the expert Inspectors of the Bombay Fire Insurance Association. Ventilating and humidifying plants have also been installed and adequate provision has been made in all well-organised factories for the proper lighting of the various departments and the sanitation and cleanliness of the lavatories and other parts of the mill premises.

Bleaching and Finishing.

The equipment of a bleaching department consists of singeing machines, either plate, roller or gas, and tanks for dissolving bleaching powder. For the boiling of cloth, kiers of various types are used such as the injector-circulating, centrifugal pump circulating with heating by ordinary steam coils, closed or open, and in many cases, multi-tubular heaters are employed. For washing, chemicking and scouring the large and small machines treating the cloth in rope form are generally used; in some mills, however, the tank system is used in which the cloth is piled up and the liquors circulated by means of pumps, percolating through the cloth out of the perforated false bottom into the tanks below, whence the liquors would again be pumped on to the cloth.

The piling-up arrangement after chemicking and scouring is more often seen to be quite simple. In front of the machine the cloth, after impregnation, is piled up on a bed of stones or on wooden stillages. But in other places concrete or wooden tanks are employed in which the cloth is piled up and allowed to remain for the necessary length of time for the liquors to act. After the final washing, the pieces are, in some mills, merely allowed to drain ; in others they are squeezed through a squeezing machine and passed out on an overhead scutcher for opening them out from the rope condition. They are next passed through a water-mangle and taken on for drying and finishing.

Drying machines of various types have been installed in the Bombay mills and amongst these the most important ones are the cylinder-drying machines both of the horizontal and vertical types. In some mills the cell-dryer is also utilised.

The uncertainty of the bleaching powder and the high prices it reached during the war period, and the convenience of using a solution of sodium hypochlorite, have led many mills to put up electrolysers in their bleaching departments for preparing sodium hypochlorite from common salt.

The finishing departments in the different mills have an equipment varying very much in details. A very moderate equipment consists of a starching (padding) machine attached to a drying range, followed up by three or more bowl calenders. The more elaborate equipment consists of different kinds of starching and filling machines. Damping machines, belt-stretching machines, plain and friction calenders, hydraulic calenders, beetling machines, stentering range, etc., and folding, plaiting and measuring machines are the necessary additions in all mills whether they have the regular dyeing, bleaching and finishing departments or not.

Block and Machine Printing.

Some mills have also a printing department usually of a minor kind. The work, such as the printing of floor-cloths, tent borders and other heavy goods, is carried out by hand-block printing. In some places, the printing of women's sarees, chhayals, kerchiefs, etc., is also done by hand-block printing. Besides having the necessary number and variety of blocks, there is usually a steaming kier for steaming the printed pieces. Only two mills in the city of Bombay have introduced Printing Machines, and carry on printing work on a large scale with power machines which have not yet been taken up in right earnest by other mills although there is a large field for the printing of various kinds of cloths, especially shirtings and chhayals.

The Dyeing Department.

The Dye-house in a Bombay cotton mill usually forms an addition to the spinning and weaving departments. In the case, however, of the Lancashire factories the spinning mill sends its yarn to a dyer, instructing him to size it to the required extent and to send it on to the manufacturer for weaving. The latter also sends his grey goods to the dyer for dyeing according to his contracts, and the dyer then dispatches them to the finishers, who in their turn are a specialized set of workers, doing business in finishing only. These arrangements of specialized factories, each doing its own part of the job, do not exist in Bombay or other parts of India ; but the same management which looks after spinning and weaving attends to the dyeing, bleaching and finishing also. The dyeing and bleaching departments consequently form a fraction of the whole plant in a Bombay factory

and are regarded as subsidiary branches, as distinguished from the main branches of spinning and weaving. These facts explain why the dyeing departments are not usually found in a very efficient and up-to-date condition. There are mill-owners who are not quite in favour of the English system of individual growth, as the concentrated existence of all departments does lead to certain commercial advantages; but the dyeing and bleaching departments in Bombay ought to receive the same keen interest that is bestowed on the spinning and weaving sections, and ought to be run on equally efficient lines which is not the case in several concerns.

Dyeing in the Bombay mills is done mostly on yarns and cloths. Loose cotton is also dyed, some mills dyeing in cops, cheeses and beams. No bowl-warp dyeing is done, the yarn being dyed mostly on the ordinary wooden vats, and the cloths on the jiggers.

The Dyeing Plant.

The equipment of a yarn dyeing department consists of open boiling vats of wood, hydro-extractors and wringing posts, wooden dyeing vats, and either an open-to-air drying shed or steam-heated drying rooms. There are some variations in the equipment, according to the kind of work and the scale on which it is carried out. The open wooden vats for boiling the yarn are replaced by a pressure-circulating kier.

Jiggers are used for dyeing piecegoods and the preliminary boiling is done either on jiggers or kiers or at times in open vats. Some of the mills have continuous cloth-dyeing machines for such work as indigo and other vat colours. Para red dyeing is often done on the padding machine as in the case of mineral khakhi, and recently, of naphthol reds. The drying of the dyed pieces is usually done on steam-heated copper cylinders. The beam, cops and cheese dyeing is done on machines. For cops and cheese both the perforated skewer and solid skewer systems are in use, the liquor being invariably circulated by centrifugal pumps or by vacuum or suction systems.

A few of the dye-houses have a special equipmet for dyeing para red on cloth, consisting of a padding machine with a hot-air drying room for B-naphthol prepare. A specially cooled padding machine is used for passing the naphthol prepared cloth through the diazo solution, followed by a washing and soaping range and a hot-air drying chamber.

Colours and Dyestuffs.

Almost all kinds of the different classes of colours are used in the dyeing of textiles in the Bombay mills, the greatest amount of dyeing being, however done with direct cotton colours, sulphur colours, basic colours, naphthol and other colours sold under the special names given by the manufacturers.

The use of sulphur colours is made in very large quantities for all dyeings fast to washing, soaping and to light but not to bleaching. Some of the sulphur colour dyeings are topped with basic colours for shading purposes, and amongst the mordant colours, Alizarine is principally used for the dyeing of turkey red, which is carried out in large quantities on yarn. Recently, however, naphthol red is finding favour in place of Alizarine on account of its quick and easy manipulation. Vat colours are largely employed for fast to bleach colours which are necessary where the coloured yarn is woven with grey into such cloths as shirtings.

dhoties, towels and which require to be bleached after weaving. Indigo—natura and artificial—is also used in very large quantities.

A further series of vat colours—sold by the manufacturers under various names but which are chemically related and possess the common property of extreme fastness to all agencies and brilliancy—are finding extensive uses as the demand for fast colours is on the increase. All these are dyed in the hydro-sulphite vat. The ingrain colours of the type of para red are coming on the market in increasing quantities while the aniline black produced from aniline is largely employed for the production of fast to bleach black.

Amongst the mineral colours, chrome yellow, chrome orange and khaki are extensively employed, and have not been completely replaced by the aniline colours.

Dyeing by Outside Agencies or Contractors.

There are, however, mills where the dyeing is entrusted to outside agents or contractors who undertake the work on the basis of a rate per pound of yarn dyed inclusive of the cost of the dye stuff, labour and supervision, while the mills supply the necessary space, steam and other facilities. The rate for dyeing by contract varies from ½ anna to 1½ annas per pound for the direct colours and from 1¾ to 3 annas for sulphur colours. For fast to bleach colours the rates vary from 3 annas to 12 annas per pound according to the depth of the shade and the fastness.

There are mill agents who find the contract system more advantageous as it saves them the running expenses on the salaries of an expert dyer and his staff, particularly when smaller quantities of dyed goods are required. The millowner is also free from the risks involved in purchasing large quantities of colours which might deteriorate or get damaged. The large Dye-works in connection with the Textile and Spring Mills, the Currimbhoy group of mills and the E. D. Sassoon group, have proved useful and economical for dyeing the goods of the allied factories at an economical rate and with efficiency. This cannot be said of the mills where the quantity of material to be dyed is small and does not allow of the expenses of an expert dyer and an efficient plant for dyeing the goods. There are only about 2 or 3 firms who undertake the dyeing work of cotton mills in Bombay on the contract system, while the number of mills where the goods are dyed on this system are as under :—

Bombay Cotton Mill.	Jamshed Mill.
Bomanji Petit Mill.	Jam Mill.
Coorla Mill.	Manekji Petit Mill.
Crown Mill.	Phœnix Mill.
Dinshaw Petit Mill.	Sassoon Mill.
Framji Petit Mill.	Simplex Mill.
Finlay Mill.	Union Mill.
Gold Mohur Mill.	

Manufacturing Charges and Wages.

We will now deal with the manufacturing charges and wages which have been compiled from the *Labour Gazette* and the figures submitted by the Bombay Millowners' Association before the Textile Tariff Board in August 1926:—

The total manufacturing charges excluding any charges for depreciation rose by nearly 100 per cent. in 1924 as compared with 1914.

There have been slight reductions in the cost of stores during 1925 and 1926, but against this factor interest charges owing to the reluctance of the banks to lend money while the industry is depressed have been increased. In no other items can there have been any considerable changes, and it is an indubitable fact that to-day the industry is saddled with a cost of production per lb. which is approximately twice the pre-war cost.

In 1924 the costs of spinning stores were on the average 45 per cent. higher than in 1914, or in other words, cost nearly one and a half times in 1924 what they did in 1914.

The cost of stores varies with the count of yarn and type of cloth. For an average mill in Bombay the cost of stores works out at about 2 per cent. to 3 per cent. on the cost of yarn and 5 per cent. to 8 per cent. on the cost of cloth.

The increase in the cost of coal was 87 per cent. In other words, power costs in 1924, coal being the source, were nearly double as much as in pre-war years. Where electric power is used the charge in 1915 was annas ·55 per unit, while the charge in 1924 was ·725 annas per unit exclusive of the steam used for other purposes.

The cost of cotton really enters indirectly into the cost of manufacture, by reason of the fact that any increase or decrease in the price of the raw material affects the total value of the finished product and this alters the charges which have to be met by way of interest and insurance.

Cost of Manufacture.

By the courtesy of one of the members of the Bombay Millowners' Association it is possible to give a fairly exact idea as to the total increase in the cost of cloth manufactured and the increases under each head of cost at the present time as compared with pre-war in one of the most economical mills in Bombay. These figures by no means represent the average for Bombay mills but are given merely to show the percentage of difference between manufacturing costs in 1914 and 1925.

	1914.	1924.	Comparative cost in 1924 (cost in 1914 equals 100).
	Pies.	Pies.	
Coal	5·49	10·09	187
Stores	9·08	14·46	145
Labour	18·78	39·69	211
Office and Supervision	1·59	3·41	215
Fire Insurance	·55	1·67	303
Municipal and other Taxes	·61	1·57	257
Interest	2·62	5·66	216
Commission on Cloth	2·47	4·60	186
Excise Duty	3·86	9·35	242
Dyeing charges	2·36	4·40	186
Total	48·22	94·90	197
Agents' Commission	0·95	0·83	87
Income-tax and Super-tax	·49	1·94	400
Total including Agents' Commission, Income-tax and Super-tax.	49·66	97·67	197

Cotton cess and the town duty on cotton are not included in the above statement. The approximate cost of these two taxes works out at ·4 to ·5 pies per lb. The duty on stores is included in the cost of stores and is not shown separately. Duty on machinery is also not shown in the statement as this has been included in the cost of machinery as a capital charge.

The Purchase of Raw Cotton.

The method adopted by most of the mills in Bombay in purchasing raw cotton is to buy cotton from the Jaitha at Mazagon, but a growing number of the mills have their own buying agents in the cotton-growing districts who buy cotton, gin and press it and bring it to Bombay. Mills which buy direct from up-country and want good cotton have to purchase the whole of their requirements in January to May and store it at the mills until required. This entails an extra interest charge and, in the absence of a really satisfactory cotton futures market, renders cotton purchase somewhat speculative. Some of the mills which buy in the Jaithas adopt a policy of day-to-day buying which may be advantageous in a falling market. In Lancashire, the practice is to buy in Liverpool where they have a splendid system of hedging in the cotton futures market. Millowners freely use these hedges against their purchases of cotton or sales of cloth or yarn. Unfortunately, Bombay mills are handicapped to a large extent owing to the existence of five hedge contracts, the narrowness of which renders them liable to manipulation by speculators. As far as is known, almost the whole of the cotton buying in Bombay for Japan is done by two firms who purchase cotton locally, ship it to Japan and sell it to spinners there who can hedge their purchases in the sampin market.

Speculative purchases of either spot or futures cotton are rarely indulged in by Bombay mills. Usually mills buy cotton against their sales of yarn and cloth, but there is of course a very large speculative element in the cotton trade outside the mill industry. The element of speculation in buying futures could be reduced if there was a single hedge contract, as in Liverpool and New York, instead of the present five contracts.

The Bombay Millowners' Association has made repeated efforts to get the number of hedge contracts reduced, but the progress made to a satisfactory futures market, up to now, has been most unsatisfactory from the viewpoint of the general trader who desires to cover his purchases of cotton and sales of yarn and cloth and not to make a profit by selling or buying cotton futures when he has no intention of taking up actual cotton.

Commission Agents or Salesmen.

Most mills employ Commission Agents who effect sales, and guarantee the solvency of the buyers. A few mills have their own selling organisation and as far as the mills are concerned the system of sales on long credit does not exist.

As to the additions which have to be made at the present time compared with 1913 to the prices of Indian and imported yarns and piece-goods *ex* mill and *ex* godown respectively to make up their cost to the consumer, the following is the information regarding discount and brokerage :—

The rates for brokerage, discount and *sahi* are the same to-day as in 1913 for both Indian and imported piece-goods.

On imported goods, grey and bleached, discounts of 3 per cent. and 4 per cent. respectively are given to the wholesale dealer if payment is made within 7 days. An extra $\frac{1}{8}$ per cent. discount is given against payment in cash.

On Indian piece-goods brokerage is allowed at the rate of $\frac{1}{4}$ per cent. but in the case of grey goods sold by the pound the discount is $\frac{1}{8}$ per cent.

On coloured and fancies the discount given is $\frac{1}{4}$ per cent. On goods sold by the piece a discount of $3\frac{1}{4}$ per cent. is given if payment is made within 3 days.

On both imported and Indian piece-goods it is customary to give a *sahi* of Re. 1 per bale to the dealer, but in some cases this amount is increased slightly.

On locally made yarn the brokerage is $\frac{1}{4}$ per cent. and discount $\frac{1}{8}$ per cent. On imported yarn brokerage is $\frac{1}{4}$ per cent. and discount $1\frac{1}{8}$ per cent.

On imported double yarns the discount is $\frac{1}{8}$ per cent. and brokerage $\frac{1}{4}$ per cent.

These rates have remained unchanged since 1913.

Contributions to the Imperial Exchequer by the Bombay Mills.

INCOME-TAX.—The Income-tax paid by Bombay City and Island mills alone during the ast four years is as under :—

	Rs.
1922-23	1,38,48,567*
1923-24	71,26,890*
1924-25	17,20,195*
1925-26	7,69,195*

*Approximations made by the Income-tax Department.

From these it will be seen that the decline in the prosperity of the Bombay industry since 1922 has directly reduced the revenue of the country by more than rupees 131 lakhs per year under the head of Income-tax alone.

In pre-war days Income-tax was only 6 pies per rupee, but this has now been increased to 1½ annas.

SUPER-TAX—This was not levied in 1914 on companies or individuals but in 1919 was levied on a sliding scale for individuals and at the flat rate of one anna per rupee on Companies and the figures of the super-tax paid by Bombay mills during the last four years show the following contributions to Imperial revenue :—

	Rs.
1922-23	89,60,505*
1923-24	45,26,260*
1924-25	9,94,172*
1925-26	4,25,297*

*Actuals.

Municipal Taxes paid by Bombay City Mills since 1914-15.

Years.	General Tax.	Halalkhore Tax.	Water Tax by Meter. Per 1,000 gallons.	Total.
	At 9⅜ % Rs.	At 3 % Rs.	At annas 8 Rs.	Rs.
1914-15	3,32,452	1,02,539	3,07,826	7,42,818
	At 9⅜ %	At 3 %	At annas 7¾	
1918-19	5,55,472	1,68,793	4,72,671	11,96,907
	At 9⅜ %	At 3%	At annas 7¾	
1921-22	5,99,543	1,82,145	5,01,932	12,83,623
	At 11½%	At 3%	At annas 12	
1922-23	7,32,967	1,91,198	6,96,680	16,20,846
	At 11½ %	At 3 %	At annas 12	
1923-24	9,53,287	2,48,678	8,65,881	20,67,847
	At 11½ %	At 3 %	At annas 12	
1924-25	9,62,886	2,52,138	7,61,856	19,76,881
			At annas 16	
1925-26	....	....	2,53,952	22,30,833

Labour Costs.

The decrease in hours has increased the labour cost per lb. of cloth by approximately 13 per cent. For the mill whose cost of production figures are given on page 349, it has meant an addition of approximately 5.2 pies per lb. to the cost of production. Again, under the Workmen's Compensation Act, employers have to pay compensation to the operatives in cases of accidents, the amount of the compensation being dependent on the nature of the accident. Mills have accordingly to insure themselves against this risk, the present rate charged being 23 annas per cent. on the total amount of wages paid, the rate last year was 4 annas per cent.

About 60 mills have insured themselves against risks under the Workmen's Compensation Act with the Bombay Millowners' Mutual Insurance Association, Ltd., and the total premia paid by these mills is about Rs. 1,25,000 per year.

Import Duties on Stores and Machinery.

The contribution of the mill industry in the form of duties on mill stores is in the neighbourhood of rupees 50 lakhs per annum. In addition, during the last five years the industry has contributed the following amounts to Government revenues in the form of duties on cotton textile machinery imports :—

	Value of machinery imported.	Duty at 2½% *ad valorem*.
	Rs.	Rs.
1920-21	3,67,38,510	9,18,462
1921-22	7,64,18,158	19,10,452
1922-23	8,49,00,681	21,22,515
1923-24	5,60,14,868	14,00,370
1924-25	2,67,60,901	6,69,022

It must be remembered that stores and accessories used by cotton weaving mills were until 1918 allowed to be imported free of duty, but the Government of India in that year, owing to serious deficits, levied these duties which now range from 2½ to 15 per cent.

Scale of Wages in Bombay Mills in 1875 and 1905.

	1875. Rs.	1905. Rs.
Blow Room Hands	8 to 9	10 to 12
Grinders	11 to 12	13 to 14
Strippers	10 to 11	12 to 13
Can Boys	5 to 6	7 to 9
Fly-men	7 to 8	10 to 11
Drawing Tenters	9 to 10	11 to 13
Slubbing and Inter Tenters ..	12 to 13	13 to 17
Roving Tenters	13 to 14	14 to 18
Mule Spinners	18 to 22	25 to 28
,, Piecers 1st and 2nd ..	10 to 13	13 to 16
Throstle Piecers	7 to 8	11 to 12
Doffer Boys	5 to 6	7 to 8
Reelers and Winders	6 to 8	8 to 12
Warpers	12 to 16	16 to 22
Sizers, Front	20 to 35	30 to 50
,, Back	12 to 14	14 to 18
Measurers	10 to 15	15 to 20
Mechanicrs	15 to 50	15 to 50
Engine Drivers	30 to 40	40 to 70
Firemen	12 to 14	14 to 18
Nowghanies	12 to 14	14 to 18
Coolies	7 to 8	8 to 10

(From the *Indian Textile Journal*.)

(The above Wages have been increased by 100 per cent. since 1914.)

Statement showing Actual Prices paid for Stores by Bombay Mills from 1914 to 1926.

Years.	Oil Spindle. Per gallon.	Oil Shafting. Per gallon.	Oil Loom. Per gallon.	Roving Bobbins. Per gross.	Slubbing Bobbins. Per gross.	Shuttles. Per doz.	China Clay. Per ton.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	£ s.
1914	1 6	2 1	1 8½	19 1	30 6	14 6	3 13
1915	1 6	2 1	1 8½	22 10	37 9	14 6	4 17
1916	1 9	2 4	1 11½	23 10	38 1	15 6	5 18
1917	2 9	3 0	2 9	32 4	51 10	24 9	6 16
1918	5 0	5 9	5 0	51 0	75 0	34 0	7 15
1919	3 8½	4 5½	3 8½	57 9	92 0	50 6	8 18
1920	3 8½	4 5½	3 8½	63 0	100 6	54 6	10 7
1921	5 8½	6 3½	5 8½	82 3	132 0	78 0	7 15
1922	3 6½	4 0½	3 7½	59 9	95 3	46 9	6 5
1923	3 2½	3 8	3 3½	46 3	73 9	47 0	5 16
1924	3 3½	3 9½	3 4½	42 9	68 0	48 0	5 16
1925	3 3½	3 9½	3 4½	42 9	68 0	48 0	5 10
1926	3 0½	3 6½	3 1½	40 9	65 0	46 3	5 2

Years.	Farina. Per ton.	Magnesium Chloride. Per ton.	Strapping 1″ Per lb.	Strapping 2″ Per lb.	Strapping 3½″ Per lb.	Cardiff Coal. Per ton.	Bengal Coal. Per ton.	Natal Coal. Per ton.	Liquid Fuel. Per ton.
	£ s.	£ s.	s. d.	s. d.	s. d.	Rs. a.	Rs. a.	Rs. a.	Rs. a.
1914	13 6	3 12	2 9	3 2	4 0	27 8	20 12	..	..
1915	32 0	9 10	3 10	4 6	5 3	27 8	18 2	..	..
1916	34 0	..	4 8	5 3	6 2	27 8	19 14	..	..
1917	..	11 4	4 8	5 3	6 2	..	22 2	..	..
1918	..	..	5 6	6 9	8 0	..	21 0	..	..
1919	57 0	..	7 6	8 9	10 0	..	26 1	..	..
1920	42 10	..	10 6	2 11	6 6	..	34 1	..	..
1921	32 10	..	9 3	2 11	6 6	42 9	27 8	35 4	..
1922	20 10	7 15	8 0	2 2	5 5	42 8	..	31 8	..
1923	22 7	4 10	7 6	2 0	4 9	37 0	..	30 0	..
1924	22 7	5 0	7 0	1 7	4 6	..	..	..	53 10
1925	22 16	4 2	7 0	1 7	4 6	..	..	..	45 0
1926	17 15	5 16	7 0	1 7	4 6	..	..	..	44 14

Prices for Strapping of 2″ and 3½″ are given per foot from 1920.

Monthly Rates of Wages in other Indian Industries.

	1918.	1919.	1920.	1921.	1922.
	Rs.	Rs.	Rs.	Rs.	Rs.
Paper Mills—(Bengal):—					
Coolies	12	12	12	18	18
Machinemen	27	27	27	40½	40½
Boys	..	..	..	..	..
Women	7	7	7	10	10½
Bricklayers	16	16	19	28½	28½
Vicemen	30	30	30	45	45
Blacksmith	28	28	28	42	42
Carpenter	20	20	20	30	30
Enginemen	15	15	15	27	27
Woollen Mills in Northern India :—					
Card Room :—					
Head Mistry	49	45	50	76	76
Feeder	9	10	14	14	14
Mixer	10	9	14	14	15
Card-cleaner	23	19	22	29	31
Spare hand	10	10	14	15	15
Mule Room :—					
Head Mistry	82	70	71	91	92
Minder	17	15	19	26	28
Piecer	8	8	11	13	11
Spare hand	9	9	14	15	14
Finishing Department :—					
Washing and Bleaching Mistry	28	30	37	43	43
Washing and Bleaching man	10	9	14	15	15
Dyeing Mistry	20	20	26	33	35
Dyer	10	10	13	17	16
Finishing Mistry	36	41	46	52	52
Finishing man	10	9	16	16	16
Weaving Department :—					
Mistry	32	28	32	58	50
Healder	11	12	15	24	22
Weaver	15	16	21	26	28
Engineering Department :—					
Boiler Mistry	25	25	36	41	42
Engine-man	36	39	47	52	55
Oilman	10	10	15	17	16
Head Carpenter	57	61	72	78	86
Boiler-man	12	15	20	22	22
Carpenter	17	17	22	22	24
Blacksmith	25	26	28	30	33
Fitter	20	21	24	25	27
Turner	25	27	28	32	35
Tinsmith	16	19	20	20	22
Moulder	20	..	..	..	..
Mochi	11	11	18	18	18

Jute Mills :—	*Weekly.* Rs. a. p.
Spinner	5 0 0
Rover	5 12 0
Weaver	9 3 3
Carder	2 13 6

Wages of Bombay Mill Operatives Classified by Occupations.

MEN.

Occupations.	Daily average earnings. Rs. a. p.	Average earnings during month. Rs. a.
Mixing & Waste Room.		
Mukadams (Foremen of labourers)	1 10 5	43 1
Machine Tenters. ..	0 15 3	23 7
Nawghanies (trained lifters)	1 2 9	28 11
Coolies	1 0 9	25 15
Blowing Room.		
Head Jobbers	3 10 9	96 9
	*4 0 4	107 12
Assistant Jobbers ..	1 13 4	47 8
	*2 5 4	60 14
Machine Attendants ..	0 14 10	23 0
Machine Fitters ..	3 5 7	83 6
Oilers	1 2 11	29 11
	*1 8 6	39 13
Mochies (belt repairers).	*1 1 4	28 3
Coolies	0 14 10	24 2
Carding Room.		
Assistant Card Masters .	6 10 5	177 9
	*4 5 0	116 7
Head Jobbers	4 8 2	117 4
	*4 7 0	114 1
Assistant Jobbers ..	2 1 10	53 5
	*2 9 1	66 4
Flat Clothers	1 6 7	35 5
Flat Cleaners	1 1 7	28 2
Card Tenters	0 13 11	21 9
Strippers	0 15 10	24 9
Grinders	1 1 2	26 6
Can Minders	0 13 4	19 15
Lap Minders	0 15 2	20 15
Lap Carriers	0 13 5	20 7
Oilers	1 0 8	25 12
	*1 8 7	39 8
Fly Coolies	0 13 7	21 1
Roller Carriers	1 1 5	28 8
Machine Fitters or Repairers	3 1 9	76 8
Mochies (belt repairers).	1 2 10	29 9
Mukadams (foremen of labourers)	1 10 5	40 7
Drawing Frames.		
Head Jobbers	4 2 1	105 12
	*4 3 8	108 4

Occupations.	Daily average earnings. Rs. a. p.	Average earnings during month. Rs. a.
Drawing Frames—*contd.*		
Assistant Jobbers ..	2 1 1	50 1
	*2 11 6	67 2
Head Doffers	1 13 11	48 13
	*1 6 2	32 11
Line Levellers	3 7 7	90 0
	*1 7 2	32 0
Machine Fitters ..	3 4 7	81 8
Drawers	*1 3 8	27 14
Drawing Tenters ..	1 4 0	29 4
Drawing Frame Tenters.	*1 3 0	28 8
Slubbing & Intermediate Roving Frames.		
Head Jobbers	4 15 5	126 9
	*5 0 1	131 2
Assistant Jobbers ..	2 12 4	68 7
	*2 11 1	69 12
Doffer Jobbers	1 12 10	44 2
	*2 0 1	47 5
Slubbing Frame Tenters.	1 6 6	32 14
	*1 5 3	30 11
Intermediate Frame Tenters.	1 2 1	24 3
	*1 3 11	27 14
Roving Frame Tenters .	1 1 4	25 11
	*1 2 7	25 9
Mochies (belt repairers) .	1 2 11	30 2
Bobbin Carriers ..	0 12 9	18 13
Oilers	1 2 0	27 0
	* ..	..
Coolies	1 0 3	24 4
Ring Spinning.		
Head Jobbers	4 12 4	122 10
	*5 8 8	146 14
Assistant Jobbers ..	2 11 8	68 4
	*2 4 0	57 0
Line Jobbers	2 9 5	64 7
	*3 8 9	87 10

*All items are on Time Scale excepting those with asterisks which are for Piece-work.

Wages of Bombay Mill Operatives Classified by Occupations—*contd.*

MEN—*contd.*

Occupations.	Daily average earnings. Rs. a. p.	Average earnings during month. Rs. a.
Ring Spinning—*contd.*		
Head Doffers	1 12 6	42 15
	*2 1 7	51 3
Side Doffers	0 12 8	19 6
	*1 13 3	44 10
Side men or Piecers	1 0 4	23 1
Gaiters	1 0 5	23 5
Tarwallas or Followers	0 14 3	20 1
Banders	1 3 4	29 10
	*1 5 3	32 0
Bobbin Carriers	0 13 5	20 6
Mochies (belt repairers)	1 2 2	30 12
Oilers	1 3 1	29 0
	*1 9 1	34 10
Coolies	0 14 9	22 5
Mule Spinning.		
Assistant Spinning Masters	7 8 5	190 7
Head Jobbers	4 7 2	117 7
	*4 7 3	116 4
Assistant Jobbers	2 15 5	77 10
	*2 15 10	72 10
Spinners	1 13 11	44 14
	*2 1 0	50 2
Engine Piecers	1 4 8	29 5
	*1 8 4	35 12
Side Piecers	1 4 9	27 14
	*1 7 2	34 7
Creelers	0 13 6	19 8
	*0 14 11	23 3
Oilers	1 2 0	27 9
	*1 3 3	32 8
Carriers	0 14 11	22 15
Fitters	3 5 10	84 2
Winding.		
Head Jobbers	2 5 4	56 15
	*1 9 3	42 0
Assistant Jobbers	1 9 8	39 15
	*1 4 3	31 6

Occupations.	Daily average earnings. Rs. a. p.	Average earnings during month. Rs. a.
Winding—*contd.*		
Grey Winders	0 10 11	15 6
Pirn Winders	0 13 9	18 2
	*0 15 3	22 0
Cheese Winders	0 13 11	20 0
	*0 11 10	13 6
Drum Winders	*0 14 9	18 14
Universal Winders	0 14 1	19 6
Colour Winders	*1 3 7	26 15
Coolies	0 14 2	21 10
Fitters	2 6 11	56 7
Mochies (belt repairers)	1 3 6	28 0
Labellers	0 14 5	19 10
Reeling.		
Reeling Mukadams	2 3 0	54 7
Reelers	*0 12 4	15 7
Fitters	2 4 2	55 10
Coolies	0 14 5	21 14
Warping.		
Head Jobbers	2 11 9	70 4
	*2 14 0	77 10
Warpers	1 9 1	34 [illegible]
	*1 15 11	47 4
Head Creelers	0 12 11	19 1
Fitters	2 4 3	56 3
Coolies	0 14 7	21 10
Doubling.		
Jobbers	1 12 1	44 15
	*2 6 0	61 12
Doublers	0 15 4	22 7
Sizing.		
Assistant Sizing Masters	5 13 3	152 2
Head Jobbers	4 2 2	107 8
	*3 11 3	93 11
Assistant Jobbers	2 6 6	64 4
Front Sizers	3 2 11	77 0
	*2 15 0	71 6
Back Sizers	1 8 10	36 10
	*1 7 5	34 4
Beam Carriers	1 3 0	29 14
Size Mixers	1 2 9	29 10
Fitters	2 11 9	65 3
Coolies	0 15 11	24 8

* All items are on Time Scale excepting those with asterisks which are for Piece-work.

Wages of Bombay Mill Operatives Classified by Occupations—*contd.*

MEN—*contd.*

Occupations.	Daily average earnings. Rs. a. p.	Average earnings during month. Rs. a.
Drawing.		
Head Jobbers	2 12 4	71 8
	* ..	..
Assistant Jobbers ..	2 0 9	49 8
Heald Fasteners ..	1 2 7	29 6
Reed Cleaners	1 2 1	28 6
Drawers	*1 12 11	39 15
Beam Carriers	1 5 3	33 9
Reachers	0 12 8	20 4
	*1 1 4	22 10
Weft-Cellar.		
Weft Deliverers ..	1 0 3	25 1
Weft Carriers	0 14 10	22 14
Weaving.		
Assistant Weaving Masters	7 12 6	206 3
Head Jobbers	6 7 6	172 1
	*6 11 6	174 0
Assistant Jobbers ..	3 0 11	65 12
	*3 14 0	100 12
Fancy Jobbers	3 13 6	95 11
	*4 11 11	119 1
Assistant Fancy Jobbers	2 10 6	64 4
	*2 6 10	64 5
Line Jobbers	4 0 2	101 14
	*4 3 1	106 14
Machine Fitters ..	2 11 3	66 8
Weavers—		
One Loom	*1 9 5	34 7
Two Looms	*1 11 3	43 0
Three Looms	*2 2 3	55 0
Four Looms	*2 9 3	69 10
Beam Carrier Mukadams or Foremen ..	1 8 0	37 8
Beam Carriers	1 2 9	28 15
Sweepers	0 12 10	20 1
Mochies (belt repairers)	1 2 0	28 11
Coolies	0 15 2	23 5

Occupations.	Daily average earnings. Rs. a. p.	Average earnings during month. Rs. a.
Calendering.		
Head Jobbers	2 12 0	70 6
Assistant Jobbers ..	1 10 9	41 5
Front Calender Men ..	1 1 6	26 9
Back Calender Men ..	0 15 3	23 5
Bundlers	0 14 10	21 15
Sewers	0 15 7	23 10
Finishers	1 0 3	25 11
Roll Carriers	0 15 10	24 15
Mochies (belt repairers)	1 2 0	30 6
Dyeing.		
Head Jobbers	3 7 5	91 1
Assistant Jobbers ..	1 12 3	46 7
Yarn Dyers	1 2 5	27 4
Cloth Dyers	1 0 5	25 10
Mukadams or Foremen of labourers	2 2 2	54 10
Coolies	0 15 10	21 15
Bleaching.		
Mukadams	2 6 10	61 14
Assistant Mukadams ..	2 0 3	46 15
Dhobies (Bleachers) ..	1 2 3	28 6
Coolies	1 0 4	24 3
Yarn Bundling & Baling.		
Mukadams	2 0 5	50 0
Knotters	1 3 11	30 10
	*1 5 11	31 12
Pressers	1 7 2	34 12
	*1 8 6	35 11
Wrappers	0 13 7	21 5
	*0 15 3	23 13
Labellers	0 14 6	22 4
Bundlers	0 15 3	23 7
	*1 4 8	29 1
Folders	0 11 8	16 4
	*0 12 0	19 15
Weighers	1 2 4	28 8
	*1 8 3	34 6
Balers	1 4 2	31 14
	*1 6 4	34 5
Coolies	1 0 0	24 9
Nawghanies (trained lifters)	1 5 0	30 15

* All items are on Time Scale excepting those with asterisks which are for Piece-work.

Wages of Bombay Mill Operatives Classified by Occupations—*contd.*

MEN—*contd.*

Occupations.	Daily average earnings.	Average earnings during month.
	Rs. a. p.	Rs. a.
Cloth Folding, Baling and Finishing.		
Head Jobbers	2 12 10	73 6
Assistant Jobbers	1 11 9	42 10
Folding Masters	5 8 0	146 13
Head Finishers	2 2 5	55 8
Cloth or Cut-Lookers	1 12 11	45 14
Assistant Cut-Lookers	1 6 3	33 10
Sample Cutters	1 3 3	30 13
Piece Cutters	0 15 5	24 4
Finishers	1 1 8	26 11
Beetlers	1 0 1	25 10
Fitters	2 15 2	72 8
Measurers	1 6 2	32 15
Front Folders	0 15 8	23 14
Back Folders	0 15 6	22 11
Table Folders	1 0 11	26 2
Balers	1 1 10	27 10
	*1 11 11	43 1
Markers	1 0 4	25 5
Stampers	1 1 8	27 4
Labellers	0 15 0	23 8
Stitchers	0 14 1	21 3
Bundlers	0 15 3	22 15
Hoop-Cutters	1 2 2	28 11
Weighers	1 3 2	28 12
Nawghanies (trained lifters)	1 1 11	26 12
Sweepers	0 12 8	20 4
Coolies	0 15 0	22 8
Dampers	1 0 2	25 1
Engine and Boiler Department.		
Engine Drivers	3 9 9	94 9
Assistant Drivers	2 10 5	68 10
Sarangs (Boiler attendants)	2 1 1	53 15
Assistant Sarangs	2 11 0	69 14
Head Firemen	1 9 2	41 8
Firemen	1 5 8	34 8
Head Oilers	1 6 0	32 5
Oilers	1 2 8	28 13
Rope Splicers	1 10 10	42 7
Boiler Cleaners	1 0 11	27 14
Nawghanies (trained lifters)	1 3 3	29 2
Coal Coolies	1 1 5	27 8
Electrical Department.		
Head Operators	4 0 9	105 3
Motor Attendants—		
First Class	2 15 6	77 3
Second Class	1 8 1	37 12
Generator Attendants	1 15 10	50 2
Electrical Dept.—*contd.*		
Wiremen—		
First Class	2 11 5	66 12
Second Class	2 8 6	61 0
Coolies	1 3 4	29 11
Roller Coverers.		
Head Roller Coverers	1 12 7	46 10
Roller Coverers	1 2 6	28 11
Banding Makers	1 2 11	29 7
Willow Men	0 15 2	23 11
Thread Extractors	0 14 6	22 10
Hard Waste Breakers	0 15 1	23 4
Reed Repairers	1 3 8	28 12
Mechanics.		
Armature Winders	6 9 3	177 10
Foremen of Mechanics	6 6 11	170 7
Sarangs (Boiler attendants)	1 13 7	49 9
Boiler Makers	3 5 9	87 5
Head Turners	3 6 7	87 0
Turners	2 8 7	61 14
Moulders—		
First Class	3 4 6	78 7
Second Class	2 5 8	57 3
Third Class	1 15 3	47 14
Coremen	1 8 3	38 10
Strippers	1 5 0	32
Millwrights	4 4 11	100
Humidifier Fitters	2 9 3	66 4
Humidifier Attendants	1 5 0	32 13
Head Fitters	3 11 5	95 1
Fitters	2 9 4	64 1
Head Carpenters	3 6 7	74 11
Carpenters	2 4 5	56 6
Pattern Makers	3 2 6	79 3
Blacksmiths—		
First Class	2 14 9	73 10
Second Class	2 7 1	61 5
Hammermen	1 1 9	27 8
Bricklayers	2 9 5	59 13
Masons	2 2 1	50 8
Letter Painters	1 13 6	43 2
Painters	1 10 9	40 2
Plumbers	3 11 10	100 15
Riveters	0 15 2	21 10
Sawyers	..	..
Stampmakers	..	..
Tinsmiths	2 4 6	55 7
Hoistmen	1 1 1	26 4
Machinemen	1 5 10	31 10
Nawghany Mukadams (Foremen of trained lifters)	1 5 10	50 8
Nawghanies (trained lifters)	1 3 9	29 12
Mechanics Coolies	1 0 3	24 12
Line Levellers	3 1 1	79 2
Roller Coverers	1 5 5	34 6

* All items are on Time Scale excepting those with asterisks which are for Piece-work.

Wages of Bombay Mill Operatives Classified by Occupations—*contd.*

MEN—*concld.*

Occupations.	Daily average earnings.	Average earnings during month.
	Rs. a. p.	Rs. a.
Drawing Office.		
Head Draughtsmen ..	3 11 1	98 15
Assistant Draughtsmen	1 8 10	36 7
MISCELLANEOUS DEPARTMENTS.		
Store Department.		
Store-keepers	4 13 4	129 1
Assistant Store-keepers ..	2 11 0	71 12
Store Coolies	1 1 11	28 3
Godowns.		
Cotton Waste and Cloth.		
Mukadams (Foremen of labourers)	1 7 19	37 13
Nawghanies (trained lifters)	1 2 5	27 15
Waste-Godowns ..	0 14 5	22 7
Ramosees or Sepoy Department and Odd Hands.		
Head Time-keepers ..	4 7 7	119 0
Assistant Time-keepers ..	2 9 2	68 11

Occupations.	Daily average earnings.	Average earnings during month.
	Rs. a. p.	Rs. a.
Ramosees or Sepoy Department and Odd Hands—*contd.*		
Jamadars (Head Watchmen)	1 6 5	37 2
Havaldars (Assistant Head Watchmen) ..	1 5 7	35 14
Pumpmen	1 5 0	34 4
Watchmen	0 14 1	22 13
Head Sweepers ..	0 13 8	22 11
Sweepers	0 11 6	18 0
Lamp Fitters	1 10 8	43 6
Fire Brigade Men ..	1 2 1	29 4
Coolies	1 0 4	25 2
Ticket Boys	1 4 7	33 3
Office Peons	1 1 11	28 2
Mill or Factory Clerks.		
Head Clerks	6 8 4	174 12
Cotton Clerks	3 13 1	101 15
Report Clerks	2 12 9	74 2
Winding Clerks ..	2 1 0	54 10
Weft Clerks	1 12 1	40 8
Wrapping Clerks ..	1 14 4	50 4
Waste Clerks	2 14 10	77 14
Other Factory Clerks ..	2 7 2	64 14

WOMEN.

Occupations.	Daily average earnings.	Average earnings during month.
	Rs. a. p.	Rs. a.
MISCELLANEOUS DEPARTMENTS.		
Mixing & Waste Room.		
Naikins (Forewomen) ..	0 12 11	20 6
Waste Pickers	0 8 4	12 10
Coolies	0 11 10	18 3
Card Room.		
Machine Tenters ..	0 11 8	18 7
Ring Spinning.		
Side Women or Piecers	0 15 2	21 8
Gaiters	1 0 3	22 9
Tarwallas or Followers	0 12 7	18 14
Doffers	..	..
Winding.		
Naikins (Forewomen) ..	1 12 0	44 13
	*2 1 10	54 15

Occupations.	Daily average earnings.	Average earnings during month.
	Rs. a. p.	Rs. a.
Winding—*contd.*		
Drum Winders	0 12 6	17 13
	*0 14 8	19 4
Colour Winders ..	*0 13 7	19 5
Cheese Winders ..	0 14 9	18 2
	*0 13 10	19 6
Pirn Winders	0 12 2	19 0
	*0 14 8	19 11
Universal Colour Winders	0 15 4	19 1
	*0 11 11	15 6
Grey Winders	0 11 10	16 5
	*0 12 3	16 8
Other Winders	0 12 11	17 12
	* ..	..

*All items are on Time Scale excepting those with asterisks which are for Piece-work.

Wages of Bombay Mill Operatives Classified by Occupations—*concld.*

WOMEN—*concld.*

Occupations.	Daily average earnings.	Average earnings during month.
	Rs. a. p.	Rs. a.
Reeling.		
Naikin (Forewomen) ..	1 13 9	47 12
	*..	..
Reelers	0 11 1	16 0
	*0 12 6	17 5

Occupations.	Daily average earnings.	Average earnings during month.
	Rs. a. p.	Rs. a.
Bleaching and Dyeing.		
Coolies	0 10 7	15 1
Other Women.		
Sweepers in Mill ..	0 8 8	13 5
Other Female Sweepers	0 8 10	13 11
Coal Women	0 10 4	16 8
Doffer Women	0 10 10	15 15

BIG LADS AND CHILDREN.

Carding.		
Can Carriers	0 13 5	20 10
Can Minders	0 13 1	19 1
Ring Spinning.		
Side Doffers	0 12 1	17 5
Side Boys or Piecers ..	0 14 2	21 4
Gaiters	1 0 4	24 0
Tarwallas or Followers..	0 12 7	18 15
Doublers	0 12 6	18 14
Banding Boys	0 13 11	20 0
Doffers.		
Roving Boys	0 11 4	16 12
Spinning Boys	0 11 5	16 11
Followers	1 0 1	27 2

Doffers—*contd.*		
Creelers	0 13 0	18 0
Reachers	0 15 2	22 0
	*0 15 7	20 4
Drawing Department.		
Drawing Boys	1 0 7	22 14
	*1 6 6	22 5
Children (Boys & Girls).		
Roving, Half-Time ..	0 6 0	10 2
Spinning ,, ..	0 6 10	10 0
Doublers ,, ..	0 5 0	7 4
Reachers ,, ..	0 11 8	16 12

*All items are on Time Scale excepting those with asterisks which are on Piece-work.

This Young Worker gets Rs. 20 per month.

THE BOMBAY MILL INDUSTRY, 1925.

Panoramic view including the Textile Mill, The Century Mill and the Zenith Mills from Worlie Hill.

Photo Copyright.

Pre-war Mill Profits and Dividends, 1913-14.

Mill.	Profit.	Share.	Dividend.	Market Value.
	Rs.	Rs.	Rs.	Rs.
Alliance	....	1,000	*Nil.*	70
Assur	....	500	30	370
Indo-China	76,930	1,000	80	1,025
Bombay Cotton	....	500	*Nil.*	230
Bombay United	6,67,760	250	40	535
Century	12,21,730	100	18	280
Colaba Land	3,20,400	700	50	1,507
Coorla	1,55,370	1,000	70	650
Crescent	4,41,230	100	9	14
Crown	....	500	30	....
China	1,70,200	1,000	50	750
Currimbhoy	3,67,260	1,000	90	267
David	6,44,880	250	35	565
Ebrahim Pabaney	2,51,890	250	10	255
Eward Sassoon	1,36,890	200	8	197
Emperor Edward	2,20,340	500	40	497
Fazulbhoy	9,38,740	250	32-8	636
Finlay	2,68,810	250	27-8	155
Framji Petit	2,15,150	1,000	100	1,615
Gold Mohur	2,65,140	500	50	472
Hindoostan	98,000	1,000	45	675
Indian Manufacturing	1,86,850	1,000	40	500
Jamshed	1,36,880	250	12-8	140
Jubilee	38,130	1,000	*Nil.*	200
Khatau	....	1,000	85	1,360
Kohinoor	3,36,300	500	50	817
Madhovji Dharamsey	6,13,660	500	150	1,470
Manekji Petit	1,25,150			
Dinshaw Petit	2,04,590	1,000	50	3,200
Bomanji Petit	2,21,600			
Meyer Sassoon	....	100	*Nil.*	102
Moon	57,000	250	10	....
Morarji	3,55,350	1,000	175	3,140
New City	2,28,790	500	60	1,075
New Great Eastern	3,34,810	200	15	252
New Kaiser-i-Hind	....	500	40	....
Phœnix	4,10,970	100	12-8	170
Presidency	....	1,000	*Nil.*	270
Sassoon	1,98,620	1,000	50	725
Spring	6,54,400	250	55	....
Standard	3,86,650	500	75	1,435
Swadeshi	8,99,470	500	120	1,675
Swan	1,55,510	250	20	130
Textile	9,08,690	500	110	1,425
Union	74,350	250	*Nil.*	200
Western India	1,13,260	1,000	45	600

Comparative Block Value of Mill Property in Bombay: 1914 and 1924.

Mills.		Spindles.	Looms.	Land and Building.	Plant and Machinery.	Total Block Value.
				Rs.	Rs.	Rs.
Alliance ..	1914	19,000	440	17,38,600	5,65,300	23,03,900
	1924	28,000	590	4,88,800	21,72,600	26,61,400
Apollo ..	1914	42,500	(Private Concern.)			
	1924	39,660	890	17,77,600	40,76,300	58,53,900
Assur	1914	27,000	*Nil.*	5,20,500	10,68,700	15,89,200
	1924	39,200	600	18,46,500	36,04,600	54,51,100
Diamond now Birla No. 1 ..	1914		(Not Available).			
	1924	19,100	*Nil.*	3,44,300	9,65,000	13,40,300
Indo China now Birla No. 2 ..	1914	35,600	*Nil.*	4,11,900	10,64,100	14,76,000
	1924	25,600	400	22,31,000	49,87,000	72,18,000
Bombay Cotton	1914	28,000	620	6,30,200	13,20,200	19,50,400
	1924	33,650	790	8,73,000	20,95,000	29,68,000
Bombay Dyeing—						
Spring ..	1914	37,600	1,000	12,89,300	23,95,000	36,84,300
	1924	109,850	3,110	55,31,293	1,25,31,039	1,80,62,332
Textile ..	1914	53,000	1,700	14,98,700	32,57,300	47,56,000
	1924	70,450	1,700	30,11,368	60,56,677	90,68,045
Lord Reay .. now Bombay Industrial ..	1914					
	1924	24,040	560	10,22,400	15,48,500	25,70,900
Bradbury ..	1914	42,000	500	8,79,200	13,45,000	22,24,200
	1924	35,890	660	6,52,200	12,21,300	18,73,500
Century ..	1914	92,000	3,000	22,68,500	44,51,000	67,19,500
	1924	104,680	3,000	47,69,500	79,69,500	1,27,39,000
Colaba Land ...	1914	40,900	700	27,05,900	20,03,600	47,09,500
	1924	44,800	700	27,23,600	11,21,000	38,44,600
Coorla ..	1914	30,700	560	7,85,200	13,86,600	21,71,800
	1924	27,640	720	7,50,300	16,33,900	23,84,200

Comparative Block Value of Mill Property in Bombay: 1914 & 1924—*contd.*

Mills.		Spindles.	Looms.	Land and Building.	Plant and Machinery.	Total Block Value.
				Rs.	Rs.	Rs.
Crescent ..	1914	51,000	1,100	8,57,100	20,00,300	28,57,400
	1924	44,700	1,054	6,36,600	14,23,200	20,59,800
Crown ..	1914	21,000	*Nil.*	2,94,600	4,42,200	7,36,800
	1924	41,770	968	14,71,300	22,92,400	37,63,700
Currimbhoy ..	1914	84,000	*Nil.*	16,29,200	21,85,800	38,15,000
	1924	86,800	1,050	15,13,400	40,68,500	55,81,900
David	1914	67,300	*Nil.*	11,69,500	15,29,800	26,99,300
	1924	82,630	1,130	24,31,300	31,57,400	55,88,700
Dawn	1914					
	1924	39,820	*Nil.*	7,94,000	12,16,200	20,10,200
Hope ..	1914	28,800				
now Diamond ..	1924	34,560	758	28,72,800	32,41,300	61,14,100
Ebrahim Pabaney.	1914	55,000	*Nil.*	9,28,100	16,03,200	25,31,300
	1924	57,880	1,054	11,14,900	21,73,500	32,88,400
Edward Sassoon ..	1914	45,400	*Nil.*	5,83,400	9,58,900	15,42,300
	1924	45,410	868	9,92,900	26,06,600	35,99,500
Elphinstone ..	1914	34,750	762	(Private Concern.)		
	1924	49,100	764	12,80,500	35,64,500	48,45,000
E. D. Sassoon United—						
(*Registered in* 1920.)						
Alexandra ..	1914	29,350	735			
	1924	37,120	800			
E. D. Sassoon ..	1914	52,600	840			
	1924	90,030	840			
Jacob Sassoon ..	1914	96,000	2,080			
	1924	100,840	2,220	1,66,70,000	2,89,23,000	4,55,93,000
Rachel Sassoon ..	1914	*Nil.*	2,000			
	1924	*Nil.*	2,000			
Dye Works ..	1924	1,360	*Nil.*			
Hongkong ..	1914	28,700	570			
now Manchester ..	1924	25,450	850			

Comparative Block Value of Mill Property in Bombay: 1914 & 1924—*contd.*

Mills.		Spindles.	Looms.	Land and Building.	Plant and Machinery.	Total Block Value.
				Rs.	Rs.	Rs.
Emperor Edward.	1914	30,400	960	5,49,700	15,32,700	20,82,400
	1924	46,460	1,383	14,79,100	38,65,400	53,44,500
Fazulbhoy ..	1914	50,600	1,260	12,37,400	25,69,000	38,06,400
	1924	52,260	1,260	8,79,700	7,63,700	16,43,400
Finlay ..	1914	30,800	620	8,81,900	13,83,800	22,65,700
	1924	46,100	810	9,07,200	6,17,000	15,24,200
Framji Petit ..	1914	30,000	930	7,74,900	19,07,400	26,82,300
	1924	32,600	930	9,23,000	29,15,400	38,38,400
Globe	1914	28,000	750	4,76,700	10,88,500	15,65,200
	1924	29,100	750	9,90,000	18,09,500	27,99,500
Gold Mohur ..	1914	33,500	*Nil*	5,24,200	10,69,900	15,94,100
	1924	42,480	1,040	20,39,000	42,83,700	63,22,700
Hindustan ..	1914	23,000	760	6,75,900	14,21,800	20,97,700
	1924	41,060	1,170	13,80,700	36,75,500	50,56,200
Indian Mfg. ..	1914	25,700	780	6,58,400	18,16,600	24,75,000
	1924	41,330	960	15,58,300	36,99,500	52,57,800
Jam. Mfg. ..	1914			(Private Concern.)		
	1924	30,520	874	5,46,100	8,49,200	13,95,300
Jamshed Mfg.	1914	28,900	300	5,19,500	15,94,200	21,13,700
	1924	31,300	500	8,08,900	22,60,200	30,69,100
Jivraj Baloo ..	1914	36,000	560	8,37,200	15,95,000	24,32,200
	1924	33,520	663	9,60,600	21,78,100	31,38,700
Jubilee ..	1914	28,700	*Nil.*	4,51,600	7,86,100	12,37,700
	1924	39,260	450	15,36,000	44,27,000	59,63,000
Imperial .. now Kastoorchand.	1914	36,400	*Nil.*	4,22,700	9,51,800	13,74,500
	1924	81,940	913	48,93,100	1,07,02,200	1,55,95,300
Khatau ..	1914	37,400	670	10,84,100	18,08,000	28,92,100
	1924	62,850	1,512	33,00,900	59,55,900	92,56,800
Killachand ..	1914	46,500	*Nil.*	1,96,800	7,18,000	9,14,800
	1924	43,850	*Nil.*	16,17,400	52,53,400	68,70,800
Kohinoor ..	1914	47,400	750	15,04,400	21,61,200	36,65,600
	1924	69,000	1,394	30,23,500	20,28,600	50,52,100
Madhorao Scindia.	1914	41,600	*Nil.*	6,35,500	13,18,600	19,54,100
	1924	44,300	600	14,33,000	32,61,500	46,94,500

Comparative Block Value of Mill Property in Bombay: 1914 & 1924—*contd.*

Mills.		Spindles.	Looms.	Land and Building.	Plant and Machinery.	Total Block Value.
				Rs.	Rs.	Rs.
Madhowji Dharamsi.	1914	36,400	840	11,38,000	22,51,800	33,89,800
	1924	37,820	900	(See total)	(See total.)	74,84,500
Manockji Petit.	1914	66,300	2,400	27,06,200	43,07,700	70,13,900
	1924	69,000	2,380	32,86,000	50,58,000	83,44,000
Dinshaw Petit..	1914	45,200	1,380	6,89,600	25,73,000	32,62,600
	1924	42,300	1,360	10,63,500	34,64,800	45,28,300
Bomanji Petit..	1914	36,800	1,280	10,57,900	27,63,500	38,21,400
	1924	42,400	1,260	14,85,300	34,41,700	49,27,000
Queen .. now Mathradas ..	1914	35,760				
	1924	43,600	900	18,41,300	28,53,000	46,94,300
Meyer Sassoon.	1914	30,400	*Nil.*	3,66,200	6,50,200	10,16,400
	1924	42,320	1,010	12,93,900	34,03,700	46,97,600
Moon	1914	23,400	*Nil.*	4,94,700	6,28,800	11,23,500
	1924	38,500	750	12,00,000	13,65,000	25,65,000
Morarji ..	1914	60,000	1,800	13,13,100	24,50,000	37,63,100
	1924	82,540	1,600	47,47,900	71,87,500	1,19,35,400
China .. now New China ..	1914	46,000	*Nil.*	6,80,200	11,78,700	18,58,900
	1924	46,100	*Nil.*	10,00,000	22,51,000	32,51,000
New City of Bombay.	1914	30,400	*Nil.*	4,88,700	8,53,900	13,42,600
	1924	47,160	*Nil.*	4,79,300	11,50,800	16,30,100
New Great Eastern.	1914	46,400	1,060	7,29,200	15,51,700	22,80,900
	1924	49,670	1,060	12,95,500	15,60,000	28,55,500
New Kaiser-i-Hind.	1914	26,000	760	2,77,300	10,06,000	12,83,300
	1924	41,000	1,100	13,08,000	28,88,800	41,96,800
Pearl	1914			(Started in 1913.)		
	1924	49,360	1,760	11,64,000	18,78,000	30,42,000
Phœnix ..	1914	48,300	..	7,12,500	15,02,500	22,15,000
	1924	52,500	700	11,15,600	15,01,400	26,17,000
Victory .. now Planet ..	1914					
	1924	31,600	930	15,31,000	37,42,000	52,73,000
Premier ..	1914			(Started in 1921.)		
	1924	15,260	470	13,09,000	32,64,400	45,73,400

Comparative Block Value of Mill Property in Bombay: 1914 & 1924—*contd.*

Mills.		Spindles.	Looms.	Land and Building.	Plant and Machinery.	Total Block Value.
				Rs	Rs.	Rs.
Presidency ..	1914	33,000	630	6,38,100	15,13,700	21,51,800
	1924	32,630	840	10,05,600	22,41,600	32,47,200
Sorab Woollen .. now Ruby ..	1914					
	1924	12,000	360	3,79,700	6,75,300	10,55,000
Sassoon Spg. ..	1914	52,000	1,200	5,73,300	13,96,900	19,70,200
	1924	60,240	1,200	17,23,500	22,76,200	39,99,700
Simplex ..	1914			(Started in 1917.)		
	1924	37,210	1,230	19,52,200	42,16,800	61,69,000
Empress, New Empress & Connaught now Sir Shapurji ..	1914					
	1924	97,300	700	23,97,600	57,32,400	81,30,000
Standard ..	1914	40,300	1,170	7,82,000	14,49,200	22,31,200
	1924	44,540	1,170	8,67,800	12,08,500	20,76,300
*Swadeshi ..	1914	50,000	1,280	10,20,400	30,15,500	40,35,900
	1924	59,100	1,542	20,99,000	32,44,000	53,43,000
Swan	1914	29,600	600	3,41,100	7,20,700	10,61,800
	1924	31,620	600	4,49,800	4,15,900	8,65,700
*Bombay United merged into *Tata Mills ..	1914	45,000	1,150	10,23,700	20,79,600	31,03,300
	1924	108,400	3,000	1,18,96,800	1,14,66,100	2,33,62,900
Union	1914	28,700	*Nil.*	3,63,200	7,28,700	10,91,900
	1924	38,180	880	5,23,500	7,00,500	12,24,000
Victoria ..	1914	30,000	460	2,00,000	8,00,000	10,00,000
	1924	27,000	550	2,99,900	9,86,500	12,86,400
Western India..	1914	37,400	780	11,02,200	12,69,700	23,71,900
	1924	41,760	980	14,23,500	35,28,100	49,51,600

* The Bombay United was sold to the Swadeshi Mills, Ld., in May 1925 by the Tata Mills, Ltd.

Bombay Cotton Mills : Annual

Mills.		Spindles.	Looms.	Cotton.
				Rs.
Alliance	1924	28,110	592	12,33,710
Apollo	1924	39,650	900	33,02,200 (*a*)
Assur	1914	27,000	*Nil.*	19,45,000
	1924	39,200	600	23,99,540
Birla No. 1.	1924	19,080	*Nil.*	(Combined with
(Indo-China.)	1914	35,600	*Nil.*	22,34,000
Birla No. 2.	1924	25,590	400	24,08,400
Bombay Cotton	1914	28,000	620	19,35,400 (*a*)
	1924	33,640	795	23,99,220 (*a*)
Bombay Industrial ..	1925	24,030	566	20,63,950
Bombay United	1914	45,000	1,150	14,32,500
Bradbury	1924	35,880	660	28,81,840
Century	1914	92,000	3,000	48,69,500 (*a*)
	1924	104,680	2,990	90,02,230 (*a*)
(China.)	1914	46,000	*Nil.*	21,85,000
New China	1925	46,064	*Nil.*	9,14,690
Colaba Land	1914	40,900	700	29,10,000
	1924	44,790	700	36,06,330
Coorla	1914	30,700	560	15,10,000
	1924	27,640	720	24,94,540
Crescent	1914	51,000	1,100	26,98,000
	1925	44,680	1,050	39,05,530
Crown	1914	21,000	*Nil.*	11,71,000
	1924	41,760	970	28,03,320
Currimbhoy	1914	84,000	....	48,50,000
	1925	86,800	1,050	62,61,950
David	1914	67,300	....	51,00,000
	1924	82,620	1,130	66,34,600 (*a*)
Dawn	1924	39,810	*Nil.*	49,59,690

Expenditure, 1914-15 and 1924-25.

Stores.	Fuel and Electric Drive.	Salaries and Wages.	Agents' Commission.	Remarks.
Rs.	Rs.	Rs.	Rs.	
1,97,480	85,300	4,50,420	*65,000	*Waived.
....	....	4,97,100	24,000	(a) Includes stores, fuel and electric drive.
58,200	48,000	1,79,500	42,000	
2,24,200	1,33,900	5,31,410	7,500	
Birla No. 2).				
84,000	60,600	2,08,600	72,700	
1,53,640	1,18,230	6,06,690	17,000	The accounts are for No. 1 and No. 2 Birla.
....	....	3,19,400	12,000	(a) Includes stores, fuel and electric drive.
....	....	7,44,770	21,800	
3,62,100	80,600	5,57,580	48,000	
3,25,800	1,72,000	5,09,700	78,800	Included in Tata Mills in 1924.
2,26,000	96,560	6,35,480	16,000	
....	....	12,15,000	....	(a) Includes stores and fuel.
....	*3,90,260	22,31,130 (b)	....	* Electric drive only. (b) Includes Agents' commission.
77,800	62,000	3,20,000	....	
55,210	30,220	1,37,930	....	
2,37,000	1,01,000	4,20,000	39,500	
2,83,060	1,50,250	7,58,150	4,400	
1,38,000	64,700	2,67,000	71,000	
2,35,390	1,35,570	7,36,940	30,000	
2,71,000	1,21,600	4,88,000	49,000	
2,35,480	1,88,770	9,31,310	25,000	
25,000	28,600	1,00,000	27,800	
2,91,640	1,49,860	6,21,760	51,480	
1,56,500	1,41,200	*6,12,000	....	
2,02,000	2,73,600	11,70,270	40,000	
1,45,000	1,10,600	4,27,000	71,700	
....	....	11,95,220	*12,000	* Waived. (a) Includes stores, fuel and electric drive.
1,14,980	82,830	5,11,000	21,800	Private concern in 1914.

Bombay Cotton Mills: Annual

Mill.		Spindles.	Looms.	Cotton.
				Rs.
Diamond	1924	34,550	758	19,91,480
Ebrahim Pabaney ..	1914	55,000	....	30,24,000
	1925	57,880	1,054	51,91,470
Edward Sassoon	1914	45,400	....	24,84,000 (*a*)
	1924	45,408	868	40,28,779 (*a*)
E. D. Sassoon United ..	1924	254,790	6,730	2,57,05,730 (*a*)
Elphinstone	1924	49,060	764	34,82,660 (*a*)
Emperor Edward ..	1914	30,400	960	15,37,800
	1924	46,452	1,383	27,36,180
Fazulbhoy	1914	50,600	1,250	31,19,800
	1925	52,250	1,980	53,90,360
Finlay	1914	30,800	620	23,08,000 (*a*)
	1924	46,070	812	45,33,957 (*a*)
Framji Petit	1914	30,000	930	15,54,600
	1924	32,580	930	7,10,770
Globe	1924	29,100	744	24,76,300
Gold Mohur	1914	33,500	*Nil.*	20,45,000
	1924	42,470	1,040	30,59,450
Hindoostan	1914	23,000	760	10,84,000
	1924	41,050	1,167	21,87,500
Indian Mfg.	1914	25,700	780	9,91,000
	1924	41,330	960	15,74,840
Jam	1924	30,520	870	20,25,780
Jamshed	1914	28,900	300	17,76,000
	1924	31,300	500	21,46,480
Jivraj Baloo	1924	33,510	660	20,03,990 (*a*)
Jubilee	1914	28,700	*Nil.*	12,40,000
	1924	39,250	450	13,70,190
Kastoorchand	1924	79,410	913	41,76,430

Expenditure, 1914-15 and 1924-25—*continued.*

Stores.	Fuel and Electric Drive.	Salaries and Wages.	Agents' Commission.	Remarks.
Rs.	Rs.	Rs.	Rs.	
1,92,690	1,27,940	5,44,820	48,000	
95,500	74,800	3,13,000	36,000	
2,94,150	2,02,080	10,64,700	36,000	
....	....	2,65,000	24,000	
....	....	8,11,312	*36,000	* Waived. (*a*) Includes stores, fuel and electric drive.
....	13,65,460	44,12,600	*1,20,000	*Waived. (*a*) Includes stores.
....	....	8,51,600	40,000	(*a*) Includes stores, fuel and electric drive.
1,55,800	68,800	3,84,500	....	
2,88,890	2,37,620	9,15,140	61,450	
2,93,709	1,54,090	6,07,000	1,04,000	
4,93,880	2,46,580	11,17,670	43,300	
....	....	3,41,500	30,000	(*a*) Includes stores, fuel and electric drive.
....	....	9,31,465	36,000	
1,63,000	76,000	3,59,000	70,000	
1,05,650	56,120	3,06,440	5,800	
3,31,320	1,34,666	6,56,430	*Nil.*	
59,000	43,300	2,06,600	29,500	
2,77,190	1,66,140	8,02,370	27,330	
1,20,000	55,700	2,41,200	43,600	
2,19,600	1,31,050	5,78,320	48,000	
1,44,500	64,200	2,68,600	36,000	
1,62,580	1,05,390	5,94,770	48,000	
3,31,360	1,06,270	5,75,760	39,570	
89,300	74,600	2,65,000	20,000	
1,95,960	1,09,268	5,69,090	20,000	
....	....	6,11,560	41,650	(*a*) Includes stores and fuel.
46,800	40,000	1,30,000	16,000	
1,55,740	76,820	3,74,430	*47,730	*Waived.
6,17,910	2,96,360	13,46,100	*Nil.*	

Bombay Cotton Mills: Annual

Mills.		Spindles.	Looms.	Cotton.
				Rs.
Khatau	1914	37,400	670	14,60,000
	1924	62,840	1,510	23,55,770
Kilachand	1924	43,840	*Nil.*	23,24,740
Kohinoor	1914	47,400	750	21,68,000
	1924	69,000	1,390	43,32,620
Madhavji Dharamsey ..	1914	36,490	840	16,46,000
	1924	37,810	900	22,60,000
Madhorao	1924	44,320	604	32,85,660
Mathradas	1924	43,590	907	37,75,560
Maneckji Petit	1914	66,300	2,380	35,14,000
	1924	68,996	2,379	....
Bomanji Petit	1914	36,800	1,280	17,81,000
	1924	42,368	1,263	....
Dinshaw Petit	1914	45,200	1,380	21,77,000
	1924	42,296	1,358	....
Total for the last three Mills, for 1924 :—				1,08,76,450
Meyer Sassoon	1914	30,400	*Nil.*	17,00,000 (*a*)
	1924	42,310	1,012	38,82,850 (*a*)
Moon	1914	23,400	*Nil.*	12,24,000
	1924	38,490	760	29,89,640
Morarji	1914	60,000	1,800	32,85,000
	1924	82,530	1,600	48,91,146
New City	1914	30,400	*Nil.*	20,72,000
	1924	47,160	*Nil.*	33,85,740
New Great Eastern	1914	46,400	1,060	23,36,700
	1924	49,670	1,060	36,24,430
New Kaiser-i-Hind	1914	26,000	760	12,40,000
	1924	40,950	1,104	27,45,380
Pearl	1925	49,350	1,760	45,36,500
Phœnix	1914	48,300	....	28,78,000
	1924	52,500	696	51,24,570

Expenditure, 1914-15 and 1924-25—*continued.*

Stores.	Fuel and Electric Drive.	Salaries and Wages.	Agents' Commission.	Remarks.
Rs.	Rs.	Rs.	Rs.	
1,68,000	72,000	3,12,800	52,000	
5,78,640	1,58,460	10,69,680	48,000	
81,270	1,34,510	4,69,820	18,000	
1,48,000	82,600	3,91,000	38,500	
4,13,170	2,73,530	11,33,350	12,000	
3,97,700	1,45,800	4,82,300	76,400	
6,92,130	3,83,830	11,11,620	35,000	
2,58,570	2,04,740	7,15,110	*Nil.*	
2,41,500	1,60,670	8,21,990	*Nil.*	
3,56,000	1,94,000	8,06,700	1,37,000	
....	....	....	....	
2,61,000	1,02,800	4,80,490	82,000	
....	....	....	....	
1,79,500	1,41,000	4,65,000	91,000	
....	....	....	....	
10,73,390	7,65,070	35,33,240	4,38,910	
....	....	1,92,000	18,000	(a) Includes stores, fuel and electric drive. *Waived.
....	....	8,22,620	*36,000	
40,300	37,300	1,90,000	....	
81,810	79,750	2,69,530	60,990	
3,61,700	1,60,600	5,59,400	1,30,000	
8,13,570	3,63,030	16,62,430	48,280	
47,700	40,500	1,88,000	22,000	
1,19,800	89,380	4,38,830	*Nil.*	
2,22,000	1,22,000	4,86,000	40,000	
2,52,820	1,41,140	8,56,680	26,000	
1,48,000	57,800	2,55,000	14,000	
4,35,100	2,13,450	8,02,970	30,400	
2,47,410	1,90,860	9,70,740	36,000	
96,600	70,300	2,99,000	45,600	
3,40,580	1,58,650	8,67,400	33,200	

Bombay Cotton Mills : Annual

Mills.		Spindles.	Looms.	Cotton.
				Rs.
Planet	1924	31,580	930	19,97,000
Premier	1924	15,260	472	5,94,820
Presidency	1914	33,000	630	8,63,000
	1924	32,620	840	13,49,480
Ruby	1924	11,990	365	22,42,560 (*a*)
Sassoon	1914	52,000	1,200	26,56,000
	1924	60,240	1,220	25,53,540 (*a*)
Simplex	1924	37,200	1,230	38,04,590
Sir Shapoorji	1925	97,280	687	94,58,440
Spring	1914	37,600	1,000	26,78,400 (*a*)
	1924	109,850	3,116	1,03,83,140
Standard	1914	40,300	1,170	18,58,000
	1924	44,530	1,180	30,45,630
Swadeshi	1914	50,000	1,280	38,04,000
	1924	59,080	1,540	57,47,660
Swan	1914	29,600	600	14,98,500 (*a*)
	1924	31,610	600	28,21,560 (*a*)
Tata	1924	63,250	1,800	77,00,730
(Bombay United).	1924	45,130	1,187	(The Expenditures
Textile..	1914	53,000	1,700	38,35,400 (*a*)
	1924	70,500	1,694	65,23,252
Union	1914	28,700	....	15,80,000
	1924	38,170	866	35,58,619 (*a*)
Victoria	1923	27,000	556	14,73,870
Western India	1914	37,400	780	9,91,000
	1924	41,760	977	21,86,130

Bombay Cotton Mills :

Prepared by Messrs. A. F. Ferguson & Co. for the

Year.	Mills.	Capital Paid-up	Reserves including Carry Forward.	Original Cost of Land, Buildings and Machinery.	Land, Buildings and Machinery, after Depreciation.	Annual Depreciation written off.
		Rs.	Rs.	Rs.	Rs.	Rs.
1917	66	7,65,67,395	2,36,35,705	17,98,21,456	12,12,46,916	85,65,934
1918	63	8,10,45,715	3,49,59,777	19,52,73,733	12,76,21,853	87,87,908
1919	66	9,40,10,530	3,78,77,058	20,94,82,990	12,89,11,504	1,44,39,246
1920	77	16,98,67,485	6,53,25,223	33,50,48,254	23,70,93,186	1,63,75,066
1921	77	17,83,11,137	9,80,94,780	38,08,54,759	26,23,30,072	1,81,78,737
1922	77	17,96,28,996	12,44,45,090	42,94,89,978	29,54,90,301	1,38,41,139
1923	81	19,18,62,213	*13,98,14,803	46,54,95,302	*30,71,58,766	*1,81,82,222
1924	79	19,28,15,936	*12,13,10,342	46,76,48,463	*30,15,80,391	*1,83,54,013

N.B.—The figures for 1923 and 1924 marked * are arrived at after making adjustments as some mills had not made allowance for depreciation.

Expenditure, 1914-15 and 1924-25—*continued.*

Stores.	Fuel and Electric Drive.	Salaries and Wages.	Agents' Commission.	Remarks.
Rs.	Rs.	Rs.	Rs.	
3,75,000	2,60,000	8,25,000	18,000	
97,600	94,980	5,21,210	36,000	
1,28,300	53,600	2,29,000	....	
2,15,700	1,21,980	5,37,550	*23,650	*Waived.
....	....	3,98,000	....	(a) Includes stores, fuel and electric drive.
3,00,000	1,55,500	5,52,400	74,500	
....	....	5,94,060	21,360	(a) Includes stores, fuel and electric drive.
6,28,530 (a)	....	10,78,530	18,000	(a) Includes fuel and electric drive.
5,12,440	3,51,230	16,96,730	*48,000	*Waived.
....	....	5,91,800	....	(a) Includes stores, fuel and electric drive.
9,87,910	5,11,248	22,86,130	56,120	
2,69,000	1,46,000	5,88,000	....	
3,64,910	2,24,680	8,75,890	54,520	
2,95,000	2,02,800	6,47,500	87,000	
4,88,010	2,84,000	14,45,700	1,21,250	
....	... ...	3,06,300	17,000	(a) Includes stores, fuel and electric drive.
... ...	... ...	6,04,570	31,560	
8,53,410	5,29,020	22,79,080	*73,860	* Includes office establishment and allowance.
Include Bombay United).				
....	....	9,00,000	....	(a) Includes stores, fuel and electric drive.
6,97,300	3,84,480	16,01,860	33,170	
57,300	55,000	1,95,000	12,000	
....	....	6,96,020	12,000	(a) Includes stores, fuel and electric drive.
2,23,360	1,23,790	4,57,570	75,250	
1,44,500	64,200	2,68,600	36,000	
2,37,320	1,15,220	5,56,430	*Nil.*	

Financial Figures.

Bombay Millowners' Association in July 1926.

Net Profit or Loss.	Dividend.	Percentage of Dividends to Paid-up Capital.	Reserves.	Provident Fund.	Carry Forward.
Rs.	Rs.		Rs.	Rs.	Rs.
3,02,06,860	1,69,62,045	22.2 on Capital.	80,96,030	1,07,893	50,40,892
2,28,07,546	1,91,95,613	23.7 Do.	38,23,022	48,692	§2,59,781
6,15,66,648	3,77,20,074	40.1 Do.	1,90,36,873	2,06,414	46,03,287
10,10,63,174	5,93,15,856	35.2 Do.	3,18,18,035	3,02,519	91,26,764
8,46,44,605	5,34,78,623	30.0 Do.	3,32,60,455	3,37,813	§24,32,286
3,87,51,591	2,94,44,334	16.4 Do.	1,38,03,308	63,402	§45,50,453
*†1,28,13,117	93,69,467	4.9 Do.	‡9,72,092	....	*§2,12,10,492
*†2,42,77,106	60,84,686	3.2 Do.	‡63,67,302	....	*§2,39,94,490

† Net loss. ‡ Withdrawals from Reserves. § Balance Loss carried forward.

Bombay Cotton Mill Shares in 1900.

Name of Mills.	Paid-up Capital.	Reserve.	Share Values. Original Value.	Share Values. Market Value.	Total Spindles.	Looms.
		SPINNING MILLS.				
	Rs.	Rs.	Rs.	Rs.		
Anglo-Indian	9,36,000	5,50,383	100	10	45,592	..
Assur Veerjee	4,92,000	5,000	500	..	27,516	..
Bombay Cotton	6,00,000	4,78,259	500	440	20,448	..
Bombay National	4,67,150	2,000	1,000	350	24,704	..
Britannia Mills	10,00,000	4,36,330	1,000	275	39,676	..
China Mills	10,00,000	4,37,777	1,000	400	45,344	..
City of Bombay	7,00,000	6,32,070	1,000	550	33,452	..
Connaught	6,21,000	10,26,415	500	475	32,760	..
Colaba Land	28,00,000	4,18,815	700	395	24,184	..
Currimbhoy	8,00,000	1,80,000	1,000	500	63,670	..
Damodhar	10,00,000	73,315	1,000	250	36,816	..
David Mills	9,00,000	1,93,000	500	230	28,800	..
Do. (No. 2)	....	....	..	..	38,632	..
Dhun Mills	3,18,000	79,207	1,000	..	17,808	..
Empress	14,37,381	13,47,255	500	235	35,716	..
Do. (new)	....	....	..	..	41,564	..
Hope Mills	5,26,090	1,76,000	1,000	50	28,800	..
Howard & Bullough	7,46,250	14,04,854	500	440	43,824	..
Imperial	6,80,000	5,00,997	500	190	37,962	..
Indo-China	5,91,000	3,80,000	591	..	30,224	..
James Greaves	6,60,000	8,86,410	500	340	39,128	..
Jamshed	9,23,500	2,91,950	250	105	29,448	..
Jubilee	8,43,000	1,90,082	1,000	292½	28,992	..
Kohinoor	14,00,000	*Nil.*	500	260	38,637	..
Leopold	3,50,000	7,11,217	100	155	10,728	..
Lukmidas	10,00,000	2,90,678	1,000	415	44,476	..
Mahaluxmi	6,50,000	*Nil.*	650	..	24,888	..
Peroo Mahomed	8,59,000	1,14,288	1,000	..	31,704	..
Queen Mills	7,99,000	5,40,470	799	854	34,320	..
Ripon Manufacturing	6,36,000	5,85,771	1,000	675	39,348	..
Star of India	9,92,000	2,74,913	1,000	350	41,552	..
Sun Mills	5,30,000	*Nil*	250	130	31,074	..
Union	8,20,000	1,20,000	1,000	..	30,432	..
		WEAVING MILLS.				
Alliance	7,91,000	2,20,212	1,000	150	33,432	431
Bombay United	11,25,000	*Nil.*	250	200	33,056	648
Coorla	13,00,000	2,28,000	1,000	375	30,704	563
Framjee Petit	12,50,000	3,17,495	1,000	285	25,888	506
Hindostan	12,00,000	3,35,000	1,000	335	28,464	728
Indian Manufacturing	9,00,000	2,00,000	900	460	28,980	756
Jewraj Balloo	11,00,000	6,08,196	1,000	..	35,356	571
Khatao Makunjee	9,95,000	1,35,300	1,000	360	35,042	539
Lord Reay	4,65,000	1,22,212	1,000	..	23,100	352
Morarjee Goculdass	11,50,000	50,000	1,000	1,350	40,024	760
Manockjee Petit	40,50,000	7,99,832	1,000	1,690	66,224	1,252
Mazagon	12,50,000	6,850	250	45	21,168	450
Presidency Mills	8,49,000	5,92,821	1,000	485	33,228	60
Soonderdass	6,50,000	4,90,086	1,000	275	22,980	369
Sassoon	21,63,000	2,20,000	1,000	500	48,180	1,034
Standard	7,98,000	*Nil.*	500	200	31,724	393
Swadeshi	20,00,000	4,49,612	500	550	49,308	1,030
Western India	12,00,000	2,77,745	1,000	250	30,680	577

Consumption of Cotton in Bombay Mills in 1924-25.

MILLS.	Spindles.	Cotton consumed 1924-25. In Candies of 784 lbs.
Alliance	28,116	2,250
Apollo	39,654	6,472
Assur	39,208	6,959
Birla No. 1	19,086	2,409
,, No. 2	25,592	2,722
Bombay Cotton ..	33,648	4,651
Spring	109,848	18,312
Textile	70,368	11,290
Bombay Industrial ..	23,796	3,362
Bradbury	35,884	6,984
Century	51,860	7,502
Zenith	58,580	7,422
Colaba Land	33,416	4,700
Jehangir Wadia ..	11,376	2,728
Coorla	27,640	4,587
Crescent	44,688	7,087
Crown	41,768	5,605
Currimbhoy	86,804	12,903
David No. 1	27,280	11,926
,, No. 2	41,810	
Dawn	39,816	11,924
Diamond	34,552	4,367
Ebr. Pabaney	57,880	9,437
E. D. Sassoon United—		
Alexandra	37,120	16,310
E. D. Sassoon ..	90,026	....
Jacob Sassoon ..	100,832	15,928
Edw. Sassoon	45,408	7,240
Elphinstone	49,064	7,397
Emp. Edward	46,452	6,506
Fazulbhoy	52,256	8,992
Finlay	46,072	7,867
Framjee Petit	32,584	5,104
Globe	29,104	5,146
Gold Mohur	42,472	7,572
Hindoostan	41,056	5,855
Indian Mfg.	41,328	4,122
Jam	30,520	3,817
Jamshed	31,300	5,587
Jivraj Baloo	33,516	2,632
Jubilee	39,252	2,667
Kastoorchand	35,314	5,371
Imperial	46,620	3,318
Khatau	62,844	5,364
Kilachand	43,846	8,762
Kohinoor	69,200	8,317
Madhorao Scindia ..	44,320	7,688
Madhowji	37,452	4,278
Manockjee Petit ..	68,996	11,304
Dinshaw Petit	48,104	3,174
Bomanjee Petit ..	42,368	5,739
Mathradas	43,596	5,980
Meyer Sassoon	42,312	6,822
Moon	38,494	6,818
Morarji	82,532	12,218
New China	46,064	4,559
New City	43,128	6,685
New Great Eastern ..	49,668	7,496
New Islam	19,652	2,199
New Kaiser-i-Hind ..	40,944	4,624
Pearl	49,356	8,659
Phœnix	52,500	10,437
Planet	31,586	4,620
Premier	14,468	1,623
Presidency	32,624	3,114
Ruby	12,868	4,944
Sassoon	49,464	6,243
Simplex	38,144	6,504
Sir Shapoorji Broacha—		
Connaught ..	96,560	12,688
Empress ..		
New Empress		
Standard	44,536	6,475
Swadeshi No. 1	59,084	10,685
,, No. 2 (Bombay United)	45,128	4,337
Swan	31,616	4,959
Tata	63,248	9,389
Union	38,178	4,974
Victoria	26,771	2,818
Weljee Dharamsey ..	6,144	580
Western India	41,760	5,254

Bombay Cotton Mill Shares : Fluctuations in

The following figures of the maximum and minimum market value been specially compiled for this Publication from the

Market Value.

Mills.	Share Value 1925 Rs.		1925	1924	1923	1922	1921	1920	1919
			Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Alliance	100	{	90	120	220	425	450	500	300
			40	70	120	200	330	290	90
Apollo	50	{	20-8	26-4	52-8	100	145		
			6-2	14	22-8	40	30		
Bombay Cotton ..	500	{	560	605	885	1,300	1,445	1,750	920
			301-4	445	600	830	860	870	542-8
Bombay Dyeing ..	250	{	1,200	913-12	1,395	1,715	2,020	4,400	2,750
			725	637-8	747-8	1,145	2,800	2660	1,360
Bradbury	250	{	500	570	925	1,200	1,350	1,025	725
			320	420	500	950	730	510	350
Century	100	{	592-8	472-8	682-8	1,045	1,375	1,560	897-8
			297-8	325	426-4	550	920	850	392-8
Crescent	100	{	268-12	295	422-8	645	845	802-8	497-8
			167-8	196-4	216-4	350	450	475	205
Currimbhoy ..	250	{	520	500	600	2,200	2,440	1,390	930
			295	390	475	1,430	1,035	860	312-8
David	500	{	500	575	750	2,000	1,920	1,955	1,420
			350	430	575	1,315	1,395	1,282-8	545
Dawn	250	{	720	715	970	1,475		1,800	1,025
			525	520	605	810		1,000	350
Elphinstone ..	100	{	40-10	55	107-8	202-8	280		
			19	29	51-4	86-4	127-8		
Emperor Edward ..	500	{	450	600	1,080	1,350	1,600	1,725	1,070
			250	425	520	1,050	1,120	1,050	600
Fazulbhoy	250	{	1,087-8	990	1,125	1,570	3,690	2,030	1,425
			722-8	727-8	762-8	1,050	1,450	1,350	660
Finlay	250	{	885	800	870	1,880	1,855	1,705	1,160
			120	540	550	1,210	730	950	367-8
Framji Petit ..	1,000	{	1,050	1,250	1,900	2,350	2,800	3,700	1,900
			500	950	1,225	1,900	2,000	1,900	1,200
Globe	100	{	52-8	80	155	235	320	395	212-8
			40	40	67-8	135	240	205	75
Hindustan ..	1,000	{	1,115	1,200	1,750	2,525	2,600	2,500	1,400
			900	875	1,100	1,750	1,800	1,350	800
Indian Manufacturing	1,000	{	1,000	1,175	1,800	2,550	2,700	2,300	1,150
			750	875	1,100	1,750	1,750	1,150	750
Jamshed ..	250	{	140	165	315	565	665	480	240
			60	105	150	300	370	225	80

Market Value from 1910 to 1925. *(Copyright.)*

of Bombay mill shares during each year from 1910 to 1925 have records of the *Native Stock and Share Brokers' Association.*

Market Value.

1918	1917	1915	1914	1913	1912	1911	1910
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
185				105	62-8	62-8	
80				70	62-8	35	
920	570	195	135	317-8	430	450	
510	242-8	85	90	90	335	90	
4,765	1,150	710	676	772-8	690	625	550
4,020	880	600	570	600	587-8	550	535
620	700						
350	340						
580	487-8	210	260	300	311-4	285	
327-8	262-8	165	180	210	255	165	
330	307-8	111-4	117-8	150	106-4	92-8	88-12
172-8	170	80	85	100	75	60	67-8
505	460	232-8	231-4	1,200	1,255	1,050	1,087-8
282-8	265	161-4	172-8	729	980	775	920
670	715	570	508-12	590	470	423-12	400-4
505	470	490	452-8	405	402-8	350	352-8
410	405						
300	405						
850	640	422-8	450	530	550	597-8	800
525	435	340	400	390	520	507-8	575
995	970	447-8	478-12	647-8	427-8	272-8	232-8
592-8	557-8	350	362-8	395	252-8	185	187-8
845	537-8	352-8	320	397-8	350	297-8	262-8
345	245	133-12	240	275	277-8	222-8	215
1,620	1,440	1,285	1,425	1,770	1,640	1,465	1,745
1,150	1,300	1,120	1,200	1,360	1,340	1,115	1,280
115	115						
65	80						
1,375	830	510	575	715	685	515	
825	500	440	475	500	502-8	410	
1,025	890			550	490	375	391-4
700	250			495	350	335	325
165	115	96-4	106-4	197-8	207-8	172-8	175
80	35	70	85	70	162-8	137-8	142-8

Bombay Cotton Mill Shares :

Market Value.

Mills.	Share Value 1925 Rs.	1925 Rs.	1924 Rs.	1923 Rs.	1922 Rs.	1921 Rs.	1920 Rs.	1919 Rs.
Kastoorchand ..	500	185	215	480	1,350	1,825	3,225	2,080
		50	118-12	190	470	1,345	1,600	650
Kohinoor	500	1,265	1,425	1,920	3,620	3,950	4,820	2,990
		800	1,000	1,200	1,570	2,615	2,820	1,052-8
Manekji Petit ..	1,000	2,750	3,000	3,900	5,000	6,300	7,800	3,700
		2,050	2,650	3,100	3,700	4,000	3,700	2,200
Mathradas	500	272-8	350	600	1,125	1,300	2,800	2,150
		90	200	335	600	730	1,800	1,100
Meyer Sassoon ..	100	137-8	180	275	405	490	570	440
		93-12	120	165	200	210	300	155
Moon	250	1,200	1,200					
		800	1,200					
Morarji Goculdas ..	1,000	2,900	4,050	5,400	7,500	8,200	7,000	4,700
		2,000	2,390	3,950	5,000	5,300	4,700	3,200
New Great Eastern ..	200	485	567-8	672-8	1,080	1,350	1,260	742-8
		236-4	273-12	395	520	635	735	265
Pabaney	250	380	405	615	1,060	1,335	870	575
		225	280	360	550	540	550	220
Pearl	250	620	640	902-8	1,315	1,650	1,520	1,025
		382-8	465	582-8	740	785	925	510
Phœnix	100	585	600	840	1,170	1,402-8	1,430	920
		397-8	400	455	715	700	875	330
Planet	100	35	81-4	157-8	330	415	350	235
		10	27-8	77-8	132-8	152-8	207-8	100
Premier	100	91-4	110	117-8	240	315		
		42-8	75	85	100	152-8		
Simplex	250	257-8	341-4	565	1,067-8	1,245	1,430	997-8
		85	180	317-8	435	520	710	450
Shapurji Bharucha ..	100	115	420	240	427-8	562-8	462-8	362-8
		47-8	95	150	185	245	325	108-12
Standard	500	1,600	1,600			3,050	3,500	
		1,200	1,300			2,200	2,600	
Swan	250	1,300	1,040	930	1,485	1,515	1,760	1,225
		150	680	695	895	720	990	440
Tata	500	245	380	790	1,605	1,835	3,000	1,530
		42-8	145	410	800	1,350	1,480	940
Union	250	225	350	750	1,000	1,150	850	500
		175	200	350	650	600	500	400
Western India ..	1,000	560	700	1,350	1,900	2,200	1,900	1,050
		485	450	675	1,400	1,500	1,050	620

Market Value—(*contd.*)

Market Value.

1918	1917	1915	1914	1913	1912	1911	1910
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
920	1,450						
620	950						
1,955	1,140	700	762-8	822-8	787-8	767-8	702-8
950	660	590	640	682-8	725	605	605
3,150	2,200	1,785	1,975	3,227-8	2,732-8	2,750	3,925
1,950	1,450	1,150	1,735	1,970	2,362-8	2,505	2,650
1,350	960						
1,000	750						
185	100						
100	85						
4,500	2,975	2,430	5,100	3,225	3,100	2,925	
2,750	2,190	1,990	2,300	2,700	2,700	2,700	
492-8	332-8	216-4	228-12	271-4	247-8	202-8	181-4
260	162-8	170	195	185	190	155	175
335	290				255	225	
225	200				200	200	
795	705						
432-8	405						
505	325	168-12	176-4	171-4	125	105	87-8
270	165	151-4	142-8	132-8	100	72-8	86-4
140							
105							
1,140	1,092-8	312-8					
585	560	265					
161-4	170						
102-8	75						
2,485	2,270	1,062-8	1,167-8	1,465	1,385	1,185	1,140
1,690	1,360	850	842-8	1,015	1,120	855	925
1,145	645	230	282-8	308-12	252-8	242-8	
420	255	177-8	200	250	225	180	
1,050	975						
750	500						
400							
300							
925	615	410	475	650	605	417-8	425
600	370	325	375	400	410	360	360

Bombay Cotton Mill Shares :

Market Value.

Mills.	* Share Value 1925 Rs.	1925 Rs.	1924 Rs.	1923 Rs.	1922 Rs.	1921 Rs.	1920 Rs.	1919 Rs.
Assur Veerjee ..	100	11 2	55 10	102-8 62-8	202-8 80	250 75		
Bombay Industrial..	50	26 10	23-12 15	60(a) 17-8	90 52-8	125 60		
Birla..	100	21 6-8	32-8 18					
Colaba Land ..	00	177-8 87-8	198-12 120	1,975(b) 1,067-8	2,710 1,700	3,200 2,050	3,750 2,370	2,515 1,410
Cooria	100	162-8 125	200 130	195 145	3,000 1,850	3,400(c) 2,100	3,100 1,350	1,050 700
E. D. Sassoon United	7½	1-12 0-13	2-13 1-7	4-10 2-10	5-12 3-12	7-7 4-8		
Edward Sassoon ..	500	188-12 107-8	227-8 170	410(d) 210	645 300	820 445	805 550	620 210
Gold Mohur ..	100	32 13-8	60 14-8	200 65	280 140	325 125	2,000(e) 1,400	1,800 600
Jivraj Balu	250	600 600	600 600	1,100(f) 550	1,250 975	2,700 2,100	3,000 1,000	1,200 400
Khatau	100	185 67-8	275 180	420 280	740 385	840 440	900 530	6,400(g) 3,100
Madhorao Scindia..	100	65 20-8	80 37-8	150 65	375 160	430 215	565 265	480 72-8
Madhowji Dharamsi	100	435 77-8	385 210			3,900(f) 2,700	4,800 3,500	3,700 1,955
New City of Bombay	100	315 190	395 250	530 290	860 510	1,010 650	4,875(h) 2,700	2,750 1,000
New China	1,000						5,100 1,200	1,210 400
Presidency	125	75 27-8	90 60	165 67-8	315 160	370 285	490 300	390 165
Sassoon	100	45 22	65 37-8	110 52-8	162-8 160	210 140	2,300(j) 905	905 750
Swadeshi	100	680 410	670 451-4	3,370 2,437-8	5,415(k) 3,090	5,490 3,330	6,030 3,305	3,325 2,015
Victoria	100						1,000 575	575 550

* The nominal Share Values of the Mills on these pages have been changed

SHARE VALUE (*a*) Rs. 100 till 1923 ; (*b*) Rs. 700 till 1923 ; (*g*) Rs. 1,000 till 1919 ; (*h*) Rs. 500 till 1920 ; (*i*) Rs. 1,000 till 1917 ;

Market Value—(*contd.*) (See Foot-notes.)

Market Value.

1918	1917	1915	1914	1913	1912	1911	1910
Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1,700	1,500	1,365	1,497-8	1,570	1,535	1,237-8	1,170
1,265	1,100	1,280	1,255	1,300	1,220	1,065	1,065
1,275	660			780	565	567-8	510
630	425			650	450	450	490
290	250	226-4	195	197-8			
202-8	158-8	142-8	141	140			
850	550			500	450	450	
500	460			460	200	200	
800	380			530	440	400	
300	300			400	400	275	
5,500	3,700	1,340	1,390	1,410	1,400	930	720
2,600	1,650	1,190	1,200	1,260	880	730	695
3,005	2,950	1,362-8	1,167-8	1,607-8			
1,725	1,420	995	930	965			
1,400	940	1,115	1,147-8	1,102-8	940	810	760
900	795	1,025	980	915	805	715	710
730	460	500	650	817-8	1,060	1,150	
400	300	350	430	450	1,000	850	
267-8	220(i)			390	390	375	
150	130			270	360	270	
1,275	830			850	850	875	890
700	425			725	775	725	770
2,645	2,150	1,545	1,500	1,775	1,630	1,280	1,167-8
1,760	1,560	1 350	1,330	1,390	1,250	1,005	1,010
625							
525							

from the year indicated in each case as under:—

(*c*). Rs. 1,000 till 1921; (*d*) Rs. 200 till 1922; (*e*) Rs. 500 till 1920; (*f*) Rs. 1,000 till 1923; (*i*) Rs. 1,000 till 1926; (*k*) Rs. 500 till 1922; (*l*) Rs. 500 till 1921.

Bombay Cotton Spinning and

(Specially Compiled for

Mills.	* Share Value 1925	1917	1918	1919	1920	1921	1922	1923	1924	1925
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Alliance Cotton	100	..	..	..	40	40	20	..	..	..
Birla	100	..	..	26	27	15	6-8	..	..	..
Bombay Cotton	500	40	120	30	125	200	200	100	65	..
Bombay Dyeing ..	250	176	208	320	288	192	144	65	50	50
Bradbury	250	65	..	50	55	200	200	100	10	..
Century	100	60	68	128	144	120	72	26	20	20
Colaba Land	100	150	119-7	210	400	220	190	10(*b*)	7-8	6
Coorla	100	150	..	200	450	550(*c*)	550	30	15	10
Crescent	100	40	..	40	85	110	100	45	14	11
Crown	500	..	..	..	1,285	1,035	635	180	750	..
Currimbhoy	250	87-8	..	45	105	300	220	70	10	..
David	500	..	20	130	260	190	65	..	..	..
Dawn	250	60	30	200	350	300	180	60	40	40
E. D. Sassoon United ..	10	..	..	..	0-8	..	..	..	..	..
Edward Sassoon ..	200	12	20	130	100	100	60(*d*)	10	..	..
Elphinstone	100	..	..	..	15	40	25	8-8	..	..
Emperor Edward ..	500	100	115	150	175	200	140	15	..	..
Fazulbhoy	250	125	..	130	210	420	260	150	80	45
Finlay	250	50	70	150	200	150	105	65	20	..
Framji Petit	1,000	125	200	400	300	350	225	..	..	..
Globe	100	..	..	5	30	30	10	..	..	..
Gold Mohur	100	20	35	40	50(*e*)	25	8	..	..	..
Hindustan	1,000	120	300	..	300	400	400	200	75	100
Indian Manufacturing ..	1,000	150	100	100	300	400	400	200	75	75
Jamshed	250	..	..	..	100	100	30	..	..	..
Jivraj Balco	250	..	..	..	140	120	120	..	..	..
Kastoorchand	500	220	..	100	275	125	68-8	..	..	..

* SHARE VALUE (*b*) Rs. 700 till 1923 ; (*c*) Rs. 1,000 till 1921 ; (*d*) Rs. 200 till 1922 ; (*e*) Rs. 500 till 1922.

Weaving Mills Dividends 1917 to 1925.

this Publication.)

Mills.	* Share Value 1925	1917	1918	1919	1920	1921	1922	1923	1924	1925
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Khatau	100	325	850	450(*g*)	70	85	50	20	6	..
Kohinoor	500	195	225	600	600	400	170	..	..	..
Maneckji Petit	1,000	175	350	500	650	700	500	100	50	..
Mathradas	500	..	..	125	200	100	100	35	..	..
Madhowji Dharamsi ..	100	550	..	250	500	450(*i*)	300	30	..	..
Madharao Scindia ..	100	..	..	..	20	50	40	..	..	..
Meyer Sassoon	100	..	12-8	65	50	50	50	10	..	..
Moon	250	..	..	..	100	100	50	15	15	..
Morarji	1,000	250	600	300	600	850	900	450	125	135
New Great Eastern ..	200	50	50	95	110	110	65	10	10	..
New City of Bombay ..	100	31	30	100	160(*h*)	100	70	10	10	..
New Kaiser-I-Hind ..	500	..	..	..	200	225	25	..	50	..
Palkhey	250	7-8	..	11-4	75	160	180	85	15	15
Petit	250	75	..	80	180	180	110	110	40	22
Phœnix	100	50	90	100	160	175	140	45	30	10
Planet	100	..	10	12-8	25	35	..	..	..	..
Presidency	125	..	..	..	50	50	25	..	..	..
Sassoon	100	12	12½	20	35(*j*)	15	..	..	..	..
Simplex	250	125	..	..	..	35	110	15	..	..
Sir Shapurji	100	10	..	..	25	70	45	20	..	..
Standard	500	250	175	300	370	370	280	100	60	40
Swan	250	60	110	150	170	200	150	100	50	..
Swadeshi	100	290	300	800	600	550	400(*k*)	38	34	34
Tata	500	..	15	65	100	150	100	..	..	..
Union	250	15	25	50	125	125	45	..	..	..
Victoria	100	..	..	..	100	50	40	15	7½	..
Western India	1,000	60	200	..	200	300	250	100	..	40

(*e*) Rs. 500 till 1920 ; (*g*) Rs. 1,000 till 1919 ; (*h*) Rs. 500 till 1920 (*j*) Rs. 1,000 till 1920 ;

Progress of Cotton Mills in the City and Island of Bombay since 1885.

Years.	Mills.	Spindles.	Looms.	Average number of hands employed daily.	Approximate quantity of Cotton consumed.	
					Cwts.	Bales. 392 lbs.
1885 ..	49	13,47,390	12,011	41,545	13,73,743	3,92,498
1886 ..	50	13,88,773	12,068	44,111	13,69,039	3,91,154
1887 ..	55	14,46,644	12,163	43,270	15,87,649	4,53,614
1888 ..	61	14,57,015	12,752	47,789	17,50,014	5,00,004
1889 ..	69	15,91,328	13,380	52,490	19,73,055	5,63,730
1890 ..	70	18,95,660	13,785	59,139	22,26,819	6,36,234
1891 ..	67	19,09,123	14,347	61,981	26,68,967	7,62,562
1892 ..	68	19,34,716	14,900	65,687	25,50,058	7,28,588
1893 ..	69	20,41,208	16,664	67,870	25,34,910	7,24,260
1894 ..	69	20,27,374	18,265	70,553	25,57,296	7,20,656
1895 ..	69	21,23,892	20,217	75,740	28,53,879	8,15,394
1896 ..	71	21,86,323	21,335	78,455	29,73,873	8,49,678
1897 ..	75	21,87,425	21,287	69,530	24,59,646	7,02,756
1898 ..	82	22,26,982	21,379	70,728	28,60,648	8,17,328
1899 ..	82	24,10,861	22,209	77,169	33,27,800	9,50,800
1900 ..	82	25,36,891	22,215	72,914	26,06,800	7,44,800
1901 ..	81	25,71,092	22,414	82,162	24,35,153	6,95,758
1902 ..	80	25,23,769	22,845	86,122	34,55,823	9,87,378
1903 ..	80	25,33,382	23,125	86,913	34,51,798	9,86,228
1904 ..	79	25,34,230	24,136	89,915	34,04,569	9,72,734
1905 ..	81	25,60,916	28,073	92,924	37,53,582	10,72,452
1906 ..	84	26,14,323	28,778	1,00,798	39,94,424	11,41,264
1907 ..	85	26,13,483	31,982	98,101	39,05,125	11,15,750
1908 ..	86	27,34,683	35,967	1,01,536	37,77,179	10,79,194
1909 ..	89	28,00,345	39,264	1,05,751	38,45,464	10,98,704
1910 ..	89	28,24,046	41,931	1,04,550	34,44,203	9,84,058
1911 ..	87	28,90,590	42,467	1,04,500	33,37,075	9,53,450
1912 ..	86	28,85,452	43,388	1,09,691	37,71,656	10,77,616
1913 ..	90	29,25,966	45,250	1,10,033	37,52,735	10,72,210
1914* ..	85	30,09,172	48,845	1,09,860	37,73,133	10,78,038
1915* ..	86	29,94,367	51,846	1,11,924	35,91,175	10,26,050
1916* ..	86	29,84,575	53,205	1,18,303	38,36,609	10,96,174
1917* ..	87	29,33,715	57,921	1,25,713	39,71,849	11,34,814
1918* ..	87	28,82,648	59,162	1,24,199	37,39,722	10,68,492
1919* ..	85	29,34,476	60,778	1,26,368	34,99,146	9,99,756
1920* ..	83	29,64,526	60,634	1,40,208	33,50,025	9,57,150
1921* ..	83	30,25,488	62,763	1,47,740	37,12,093	10,60,598
1922* ..	82	31,17,284	65,521	1,49,224	37,59,693	10,74,198
1923* ..	81	33,49,082	68,946	1,48,771	37,08,705	10,59,630
1924* ..	82	34,27,261	71,133	1,48,414	28,75,131	8,21,466
1925* ..	82	34,56,233	72,266	1,53,009	34,81,562	8,94,732

* Year ending 31st August.

Progress of the Cotton Mill Industry in the whole of India.

Year.	No. of Mills.	No. of Spindles.	No. of Looms.	Hands employed daily.	Cotton Consumed in Cwts.	Cotton Consumed 392 lbs. Bales.
1905	197	5,163,486	50,139	195,277	6,577,354	1,879,244
1906	217	5,279,595	52,668	208,616	7,082,306	2,023,516
1907	224	5,333,275	58,436	205,606	6,930,595	1,980,170
1908	241	5,756,020	67,920	221,195	6,970,250	1,991,500
1909	259	6,053,231	76,898	236,924	7,381,500	2,109,000
1910	263	6,195,671	82,725	233,624	6,772,535	1,935,010
1911	263	6,357,460	85,352	230,649	6,670,531	1,905,866
1912	268	6,463,929	88,951	243,637	7,175,357	2,050,102
1913	272	6,590,862	94,136	253,786	7,336,056	2,096,016
1914	271	6,778,895	104,179	260,276	7,500,941	2,143,126
1915	272	6,848,744	108,009	265,346	7,359,212	2,102,632
1916	266	6,839,877	110,268	274,361	7,692,013	2,197,718
1917	263	6,738,697	114,621	276,771	7,693,574	2,198,164
1918	262	6,653,871	116,484	282,227	7,299,873	2,085,678
1919	258	6,689,680	118,221	293,277	7,154,805	2,044,230
1920	253	6,763,976	119,012	311,078	6,833,113	1,952,318
1921	257	6,870,804	123,783	332,179	7,420,805	2,120,230
1922	298	7,331,219	134,620	343,723	7,712,390	2,293,540
1923	333	7,927,938	144,794	347,389	7,530,943	2,151,698
1924	336	8,313,273	151,485	356,887	6,712,118	1,917,748
1925	337	8,510,633	154,202	367,877	7,092,085	2,226,310

The Importance of the Cotton Mill Industry in India.

The cotton consumed in the mills of India is approximately 2¼ million bales per annum which is roughly equivalent to two-fifths of the entire Indian cotton crop. The agricultural statistics published by the Government of India show that the total area of land cultivated in India is about 760 million acres, including fallow land, and the area under cotton about 27 million acres. If it may be assumed that 80 per cent. of the total population of India is engaged in agricultural pursuits, it is possible to frame a rough estimate of the number of persons dependent on the growth of cotton for the necessaries of life. Taking the total agricultural population as 250 million souls then it may be concluded that somewhere in the neighbourhood of $27/760 \times 250,000,000 = 9$ million people obtain a livelihood from cotton growing in India. All of these 9 million people are largely dependent on the Indian cotton mill industry, but two-fifths, or nearly 3,600,000, are entirely dependent on it. To these two classes of people must be added all those persons engaged in the distribution and sale of cotton piece-goods and yarn, dealers in mill stores and textile machinery, the persons engaged in the transport of cotton, yarn and piece-goods, before anything like an accurate estimate of the total number of persons in India who are directly dependent on the industry could be framed, but it is probably an under-estimation to say that 6 million people are almost wholly dependent upon the cotton textile industry for their daily bread and are enriched by its prosperity and impoverished by its lack of prosperity, a number considerably in excess of the number directly affected by any other industry in the country.—*Bombay Millowners' Association Statement.*

World Spindles and Looms.

India, United States of America, Great Britain, Germany, Japan and China.

SPINDLES.

Year.	India.	United States of America.	Great Britain.	Germany.	Japan.	China.
1895 ..	3,809,929	16,650,000	45,400,000	6,571,332	580,945	....
1900 ..	4,945,783	19,472,232	45,600,000	8,031,400	1,274,000	550,000
1905 ..	5,163,486	22,861,043	50,964,874	8,832,016	1,426,594	....
1910 ..	6,195,671	28,299,482	57,731,829	10,200,000	2,099,764	....
1911 ..	6,357,460	29,064,492	58,002,435	10,480,090	2,170,796	831,000
1912 ..	6,463,929	29,962,713	58,140,220	10,725,732	2,176,748	833,112
1913 ..	6,596,862	30,579,000	58,481,000	10,920,426	2,414,499	947,406
1914 ..	6,778,895	32,227,840	59,317,187	10,162,872	2,657,174	1,000,000
1915 ..	6,848,744	32,400,792	59,905,000	10,163,000	2,807,514	....
1916 ..	6,839,877	32,653,164	59,811,222	....	2,875,904	1,029,218
1917 ..	6,738,697	33,535,000	60,973,000	....	3,060,478	1,126,568
1918 ..	6,653,871	34,219,156	57,685,841	....	3,227,678	....
1919 ..	6,689,680	34,648,928	59,182,683	....	3,488,262	1,416,556
1920 ..	6,763,076	34,946,721	60,079,394	8,262,872	3,813,680	1,585,300
1921 ..	6,876,804	35,632,193	60,053,246	8,693,221	3,977,000	1,650,000
1922 ..	7,331,219	36,584,487	58,712,303	8,693,000	4,532,036	1,888,348
1923 ..	7,927,938	37,397,000	59,819,000	10,060,000	4,754,000	2,680,000
1924 ..	8,313,273	37,924,000	59,511,000	10,060,000	4,437,000	3,581,214

LOOMS.

1895 ..	35,338	362,067	606,585	245,000	5,000	....
1900 ..	40,124	439,465	648,820	211,818	5,045	....
1905 ..	50,139	515,006	704,357	230,200	8,140	....
1910 ..	82,725	625,719	741,197	230,200	17,702	....
1911 ..	85,352	633,909	741,260	....	20,431	....
1912 ..	88,951	671,873	758,712	....	21,898	3,738
1913 ..	94,136	709,255	786,205	....	24,224	4,755
1914 ..	104,179	696,387	805,452	230,200	25,443	....
1915 ..	108,009	689,840	808,145	....	30,068	....
1916 ..	110,268	719,358	808,796	....	31,295	4,755
1917 ..	114,621	725,366	807,543	....	36,181	5,853
1918 ..	116,484	712,426	787,679	....	40,391	....
1919 ..	118,221	700,620	790,936	....	44,401	7,193
1920 ..	119,012	708,079	798,083	190,200	50,583	7,660
1921 ..	123,783	719,120	790,399	190,200	54,994	....
1922 ..	134,620	707,469	799,000	190,200	60,893	10,814
1923 ..	144,794	744,686	795,244	240,700	60,893	13,631
1924 ..	151,485	760,625	791,674	240,700	64,460	22,477

From the Bombay Millowners' Association Report.

Rates of Freight from Bombay for Yarn and Piece-goods.

Ports.	Per ton of 40 C. ft.	Rate of freight. Rs. a.
Aden		22 8
Mombasa		25 0
Zanzibar		25 0
Natal		36 0
Durban		
Capetown		59 0
Port Said		S20 0
Basrah		25 0
Singapore		22 8
Hongkong		22 8
Shanghai		27 8
Levant Ports *via Port Said*—		*d.* *s.*
Jaffa, Beyrouth, Rhodes, Alexandretta, Chios		37 6
Piraeus, Smyrna, Metylene, Dardanelles and Constantinople		35 0
Famagosta, Larnaca and Limassol		42 6
		Rs. a.
Port Sudan via Aden		33 8
Osaka .. for cotton		Yen 3·16 per bale.

Yarn Production in Indian Mills.

The following table shows the number of pounds of Yarn produced in India per spindle which is a fairly good index of the steadiness with which the spindles have been worked, and the prosperity or depression of the industry :—

Years.	Spindles Set up.	Spindles at work daily.	Yarn produced. Cwts.	Pounds per spindle.
1886	39,32,946	Not recorded.	38,60,287	109.93
1898	42,59,720	do.	41,30,320	108.59
1900	49,45,783	do.	45,87,708	103.89
1902	50,06,965	do.	51,15,519	114.42
1904	51,18,121	47,01,318	51,57,338	122.86
1906	52,79,595	50,17,537	60,79,630	135.70
1908	57,56,020	52,91,336	56,99,063	120.63
1910	61,95,671	52,90,473	56,01,484	118.58
1912	64,63,929	54,93,477	55,80,626	113.77
1914	67,78,895	58,48,283	60,96,222	116.74
1916	68,39,877	59,00,896	64,59,219	122.42
1918	66,53,871	59,87,685	58,97,996	110.32
1919	66,89,680	60,46,323	54,91,432	101.72
1920	67,63,076	62,38,771	56,76,430	101.90
1921	68,70,804	64,07,037	58,92,880	103.01
1922	73,31,219	65,49,112	61,92,604	105.90
1923	79,27,938	67,73,718	63,02,621	104.21
1924	83,13,273	69,62,533	54,34,174	87.41

Classification of the World's Cotton.

Grade.	Quality or Variety.	Where grown.	Length of staple.	Spinning counts. Maximum.	Average Bale weight.
			Inches.		lbs.
I.	Best Sea Island.	Island, South Carolina.	2 & over	300's	400
		West-Indies	2 & over	300's	400
II.	Sea Island ...	Florida and Georgia ..	$1\frac{1}{2}$—$1\frac{3}{4}$	100's twist	400
		West-Indies	$1\frac{1}{2}$—$1\frac{3}{4}$	100's twist	400
	Best Egyptian (Sakel, etc.) ...	Egypt	$1\frac{3}{8}$—$1\frac{5}{8}$	150's weft	740
III.	Egyptian Brown and Uppers ..	Egypt	$1\frac{1}{8}$—$1\frac{3}{8}$	70's twist. 120's weft.	740
		Sudan	$1\frac{1}{8}$—$1\frac{3}{8}$	70's twist. 120's weft.	400
	Staple ...	Mississippi ..	$1^{3}/_{16}$ $1\frac{7}{16}$	70's twist. 120's weft.	500
		S. Carolina, etc. .	$1^{3}/_{16}$ $1\frac{7}{16}$	70's twist. 120's weft.	500
		Nyasaland ..	$1^{3}/_{16}$ $1\frac{7}{16}$	70's twist. 120's weft.	500
		Uganda & E. & S. Africa	1—$1\frac{1}{4}$	50's	400
	Peruvian ..	Peru	1—$1\frac{3}{4}$	50's	250
IV.	American ..	U. S.	1—$1\frac{1}{8}$	40's	510 Gross
		Mexico	1—$1\frac{1}{8}$	40's	500 app.
		Brazil	$\frac{3}{4}$—$1\frac{1}{4}$	40's	250
		Russia	0—$1\frac{1}{8}$	40's	250—500
		West Africa	1—$1\frac{1}{8}$	40's	400
		Levant	$\frac{3}{4}$—$1\frac{1}{8}$	40's	400
		India	1	40's	400
		China and Corea ..	1	40's	500
V.	Indian ...	India	$\frac{3}{8}$—$\frac{3}{4}$	30's	400 Gross
		Russia	$\frac{3}{8}$—$\frac{3}{4}$	30's	250—500
		China	$\frac{3}{8}$—$\frac{3}{4}$	30's	500

World's Supply and Distribution of Cotton.

(According to the New York "Chronicle.") (In thousands of bales of 500 lbs.)

Season.	Commercial Crops.			Total Consumption.	Supply end of Season.		
	United States.	All Others.	Total.		Visible.	Invisible.	Total.
1908-09	13,497	4,489	17,986	17,164	1,875	3,801	5,676
1909-10	10,225	5,022	15,247	16,189	1,368	3,365	4,733
1910-11	11,805	5,058	16,863	16,750	1,537	3,308	4,845
1911-12	15,684	4,846	20,530	18,566	2,096	4,713	6,809
1912-13	13,943	5,255	19,198	19,544	2,015	4,448	6,463
1913-14	14,495	6,420	20,915	19,858	2,877	4,642	7,519
1914-15	14,766	4,813	19,579	18,747	4,496	3,855	8,352
1915-16	12,634	4,737	17,371	20,344	3,045	2,334	5,379
1916-17	12,670	5,353	18,023	18,925	2,585	1,892	4,477
1917-18	11,548	5,238	16,786	17,100	2,796	1,367	4,163
1918-19	11,410	5,452	16,862	15,689	4,277	1,059	5,336
1919-20	11,814	6,397	18,211	17,778	4,530	1,240	5,770
1920-21	11,174	6,680	17,854	16,644	5,795	1,185	6,980
1921-22	11,153	8,650	19,803	19,681	3,600	3,502	7,102
1922-23	10,961	9,000	19,961	20,960	1,953	4,150	6,103
1923-24	10,964	8,710	19,674	19,640	1,990	4,147	6,137
1924-25	14,392	8,250	22,642	21,847	2,150	4,782	6,932

History of Cotton Prices, 1911-12 to 1924-25.

Season.	Liverpool Prices, pence per lb.			Alexandria Price of dosl. per kantar.	American Price of upland cents. per lb.
	American. Middling.	Indian. No. 1 Fine Oomra.	Egyptian. F.G.F. Brown.		
1911-12	6.09	5.44	9.56	17.25	9.69
1912-13	6.76	5.91	9.79	18.28	12.20
1913-14	7.27	5.62	9.45	19.02	13.49
1914-15	5.22	4.19	7.34	12.01	7.94
1915-16	7.51	5.79	10.42	19.28	11.99
1916-17	12.33	9.92	21.56	37.81	18.41
1917-18	21.68	16.10	†30.97	38.52	28.86
1918-19	19.73	17.15	27.85	37.20	30.36
1919-20	25.31	18.05	60.34	87.81	38.21
1920-21	11.89	8.21	30.24	34.59	10.08
1921-22	11.37	8.72	19.75	34.28	17.78
1922-23	14.92	10.25	17.29	30.71	24.06
1923-24	17.66	12.37	21.55	39.79	31.67
1924-25	13.76	11.04	29.82	*39.49	24.27

† F.G.F. Sakel. *10 months' average. These prices are F.G.F. Brown till 1914, since then G.F. Sakel.

Exports of Grey Cotton Piece-goods of Indian Manufacture.

(From Bombay.)

To	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.
	In Lakhs of Yards (000's omitted).				
BRITISH EMPIRE.					
United Kingdom	..	.03	.01	.03	..
Aden and Dependencies	106.28	126.14	32.28	22.90	24.15
Mesopotamia	..	..	16.92	57.66	96.18
Bahrein Islands	8.78	3.10	3.64	8.84	4.77
Ceylon	2.79	3.53	1.14	1.27	1.57
Straits Settlements and (Labuan)	13.55	9.86	1.30	.49	.82
Federated Malay States	..	..	..	..	..
Hong Kong	.19	.60	..	..	.01
Egypt	108.26	26.08	.72	.49	2.35
Natal	2.33	.82	4.93	.51	1.36
Nyasaland	..	..	..	..	..
Zanzibar and Pemba	27.31	24.59	14.58	22.52	17.01
Kenya Colony (formerly East African Prot.)	78.14	66.71	41.42	43.13	29.17
Tanganika Territory	..	..	19.85	23.42	27.80
Somaliland Protectorate	.05	..	..	.19	..
Anglo-Egyptian Sudan	..	..	14.37	18.23	10.51
Mauritius and Dependencies	6.90	11.19	7.43	7.58	5.82
Seychelles	1.32	1.27	.59	.42	.46
Australia	..	.10	..	..	..
FOREIGN COUNTRIES.					
Turkey—European	3.00	.69	..	..	..
Syria	..	..	1.64	..	2.09
Turkey, Asiatic—Levant; Black Sea	.15	.16	..	..	..
Do. Red Sea	16.25	4.30	..	..	..
Do. Persian Gulf*	172.63	61.42	..	..	..
Muscat Territory and Trucialoman.	8.67	5.45	3.17	4.94	3.84
Other Native States in Arabia	3.36	2.82	2.42	2.73	3.92
Persia	54.24	26.91	13.84	26.39	29.43
Java	..	.60	.04	.01	.01
Siam	44.37	22.26	16.87	5.91	1.32
China (not Hong Kong, Macao)	2.81	..	.08	.01	..
Japan	.10	..	..	..	..
Portuguese East Africa	38.86	32.97	35.98	55.38	60.54
Madagascar	.31	.74	..	..	.01
Reunion	.91	.29	..	..	..
German East Africa †	12.18	28.41	..	..	..
Italian East Africa (Somaliland; Eritrea)	6.45	13.02	4.73	2.41	7.46
French Somaliland	4.56	..	..	..	..
Other Foreign Countries	..	..	..	..	.28
Total Yards	724.75	473.16	237.95	305.46	330.88
Value Rupees	284.24	216.13	96.20	111.44	106.42

* Shown under British Empire as Mesopotamia since 1921-22.

† Do. Do. Tanganika Territory since 1921-22.

Cotton Prices : Variations since 1861.

Year.	Cotton, Raw Broach (Bombay) Per candy of 784 lbs.	Percentage of increase or decrease as compared with 1873.	Year.	Cotton, Raw Broach (Bombay) Per candy of 784 lbs.	Percentage of increase or decrease as compared with 1873.
	Rs.	(1873-100)		Rs.	(1873-100)
1861	130	55	1914	233	91
1864	585	229	1915	246	96
1866	408	160	1916	320	125
1868	190	75	1917	443	174
1870	302	118	1918	717	281
1871	200	78	1919	536	210
1873	255	100	1920	460	180
1876	190	75	1921	342	134
1877	209	82	1922	479	188
1880	251	98	1923	510	200
1881	243	95	1924	560	219
1882	229	90			
1883	197	77	1925		
1884	216	85			
1885	229	90	January	455	178
1892	191	75	March	481	188
1893	239	93	May	446	175
1894	215	84	July	379	148
1895	202	79	September	425	167
1896	217	85	November	389	151
1897	196	77	December	365	143
1898	175	68			
1899	150	59	1926		
1900	219	85			
1905	215	85	January	359	141
1906	252	99	February	357	140
1909	242	95	March	354	139
1910	303	110	April	341	133
1911	342	134	May	336	131
1912	283	111	June	343	134
1913	299	117			

The fluctuations in the Spot Prices of Middling Upland Cotton in Liverpool are shown below as also the Average Prices of Ginned Oomrawati and Ginned Bengal Cotton in Bombay —

	Average Price per lb. in Liverpool for Middling Upland.	Average Price per Candy of 784 lbs. in Bombay. Oomrawati (Khamgaum, Akola) Ginned "Fine."	Delivery.	Bengal Ginned "Fine."	Delivery.
1924.	*d.*	Rs.		Rs.	
March	17·06	549½	Ready	522¾	Ready
April	18.36	564½	,,	544¾	,,
May	18.01	558	,,	548¾	,,
June	17.63	568	,,	553	,,
July	17.37	560	,,	540	,,
August	16.62	560½	,,	540¾	,,
September	14.29	522½	,,	504¾	,,
October	13.99	506½	,,	494¾	,,
November	13.55	497¾	,,	486¼	,,
December	13.23	471¼	(New) ,,	434	(New) ,,
1925.					
January	13.01	457	,,	497	,,
February	13.56	456	,,	415	,,

Receipts of Raw Cotton at, and Exports from, Bombay Port. Also Mill consumption in the Island of Bombay. In thousands of Bales (000's omitted).

Years ending 30th June.	Receipts.	Exports to			Mill consumption.
		Europe.	Elsewhere.	Total.	
1880	1,171	874	34	908	220
1881	2,244	874	60	934	273
1882	1,832	1,521	87	1,608	277
1883	1,770	1,335	95	1,430	313
1884	1,759	1,295	100	1,395	348
1885	1,139	791	70	861	392
1886	1,480	1,009	61	1,070	391
1887	1,703	1,147	40	1,187	454
1888	1,472	893	58	951	500
1889	1,851	1,286	46	1,332	565
1890	2,235	1,488	71	1,559	636
1891	2,020	1,070	107	1,177	762
1892	1,770	905	202	1,107	728
1893	1,738	816	169	985	724
1894	1,769	908	159	1,067	731
1895	1,540	525	143	668	815
1896	2,151	800	346	1,146	849
1897	1,612	603	405	1,008	703
1898	1,730	424	409	833	817
1899	2,033	578	520	1,098	951
1900	988	117	444	561	745
1901	1,896	620	340	960	696
1902	2,142	525	732	1,257	987
1903	2,454	921	349	1,270	986
1904	2,151	1,036	423	1,459	973
1905	2,609	384	664	1,048	1,072
1906	2,663	1,017	477	1,494	1,141
1907	2,949	1,169	747	1,916	1,115
1908	2,123	731	454	1,185	1,079
1909	2,166	643	723	1,366	1,099
1910	3,152	1,054	968	2,022	984
1911	2,467	1,014	668	1,682	953
1912	2,540	383	923	1,306	1,078

(Continued on next page.)

Receipts of Raw Cotton at, and Exports from, Bombay Port. Also Mill Consumption in the Island of Bombay.

In thousands of Bales (000's omitted).

Year ending 31st August.	Receipts.		Total Receipts.	Exports.			Total Exports.	Mill consumption.
	India.	Foreign Countries.		Europe.	China and Japan.	Elsewhere.		
1913 ..	2,733	46	2,779	534	1,023	30	1,587	1,047
1914 ..	3,733	6	3,739	1,301	1,245	24	2,570	1,078
1915 ..	2,683	5	2,688	405	1,441	15	1,861	1,026
1916 ..	3,133	6	3,139	294	1,691	8	1,993	1,096
1917 ..	3,103	17	3,120	302	1,321	7	1,630	1,135
1918 ..	2,279	27	2,306	293	1,213	7	1,513	1,068
1919 ..	2,525	18	2,543	195	885	11	1,091	1,000
1920 ..	3,405	22	3,427	629	1,579	24	2,232	957
1921 ..	2,763	116	2,879	494	1,381	26	1,901	1,061
1922 ..	3,353	109	3,462	645	1,896	52	2,593	1,074
1923 ..	3,580	61	3,641	851	2,086	53	2,990	1,060
1924 ..	3,199	92	3,291	1,104	1,558	53	2,715	821

Weekly Current Quotations for Local-made Piece-goods and Yarn in Bombay During the Year 1924.

Week Ending	Piece-goods (Medium Class).				Yarn (Medium Quality).		
	State of Market.	Long Cloths.	T. Cloths.	Chudders.	State of Market.	Twist No. 10s.	Twist No. 20s.
		NET RATE PER LB. IN ANNAS:					
4-1-1924	Strong.	22¾	21	20¼	Quiet.	15¼	18
18-1-1924	Steady.	23	21	20¼	,,	14¾	16
1-2-1924	Quiet.	23¼	21½	20¾	Steady.	14¾	16¾
15-2-1924	,,	23¼	21½	20¾	Quiet.	14¾	17
29-2-1924	,,	23½	21½	20¾	Nominal.	14½	17⅛
7-3-1924	,,	23½	21½	20¾	Quiet.	14½	17
20-3-1924	Steady.	23½	21½	20¾	Steady.	14¾	17
28-3-1924	,,	23½	21½	20¾	Quiet.	14¼	17
4-4-1924	,,	23½	21½	20¾	Steady.	14¾	17
17-4-1924	,,	23½	21½	20¾	,,	15	17⅛
25-4-1924	Quiet.	23½	21½	20¾	,,	15	17⅛
2-5-1924	,,	23½	21½	20⅝	Quiet.	14¾	17¼
16-5-1924	,,	23½	21½	20⅝	,,	14¾	17¾
23-5-1924	Dull.	23	21½	20½	,,	15	18
6-6-1924	,,	22¾	21¼	20½	,,	15	18
20-6-1924	,,	23	21½	20½	,,	15	18
27-6-1924	Steady.	23	21¼	20½	,,	14¾	17½
4-7-1924	,,	23	21¼	20½	,,	15	17¾
25-7-1924	,,	23	21½	21	,,	14¾	17⅝
1-8-1924	Strong.	23	21½	21	,,	14½	18
15-8-1924	,,	23¼	21½	21½	,,	14½	18
22-8-1924	Steady.	23¼	21½	21½	,,	14½	17⅛
5-9-1924	Quiet.	23	21½	21½	,,	14½	17½
12-9-1924	Steady.	23	21½	21½	,,	14½	17⅛
26-9-1924	Very dull.	22½	21	21	,,	14	17
3-10-1924	Dull.	22½	21	21	,,	14	17
17-10-1924	,,	22¼	20¾	20¾	,,	13¾	17¼
31-10-1924	,,	22	20½	20½	,,	13¾	17¾
7-11-1924	,,	21½	20	20	,,	13¾	17½
21-11-1924	,,	21½	20	20	,,	13¾	17
28-11-1924	,,	21½	20	20	,,	13¾	17
5-12-1924	,,	21½	20	20	,,	14	17
19-12-1924	,,	21	19¾	19¾	,,	13½	16¾
23-12-1924	,,	21	19¾	19¾	,,	13½	16

Weekly Current Quotations for Local-made Piece-goods and Yarn in Bombay During the Year 1925.

Week Ending	Piece-Goods. (Medium Class.)				Yarn. (Medium Quality.)		
	State of Market.	Long Cloths.	T. Cloths.	Chudders.	State of Market.	Twist No. 10s.	Twist No. 20s.
			NET RATE PER LB. IN ANNAS.				
2-1-1925	Dull.	21	19¾	19¾	Quiet.	13¼	16
16-1-1925	,,	20¾	19½	19½	,,	13	15¼
30-1-1925	,,	20¾	19½	19½	,,	12¾	15
6-2-1925	,,	20¾	19½	19½	,,	12½	14¾
20-2-1925	,,	20¾	19½	19½	,,	12½	14¾
27-2-1925	,,	20½	19¼	19¼	,,	12¾	14¾
6-3-1925	,,	20½	19¼	19¼	,,	12½	15
20-3-1925	,,	20½	19¼	19¼	,,	12½	15
3-4-1925	,,	20½	19¼	19¼	,,	12¼	14¾
17-4-1925	,,	20½	19¼	19¼	,,	12¼	14¾
24-4-1925	,,	20½	19¼	19¼	,,	12¼	14¾
1-5-1925	,,	20½	19¼	19¼	,,	12	14
15-5-1925	Very dull.	20	19	18¾	,,	11½	13½
22-5-1925	,,	19¾	18¾	18½	,,	11	13¼
1-6-1925	,,	19½	18¾	18½	,,	11	13¼
19-6-1925	,,	19	18¼	18	,,	11	13
26-6-1925	,,	18¾	18	17¾	,,	10¾	13
2-7-1925	,,	18½	17¾	17½	,,	11	13¼
17-7-1925	Steady.	18½	17¾	17½	,,	11	13¼
31-7-1925	,,	18½	17¾	17½	,,	11¼	13¾
7-8-1925	,,	18½	17¾	17½	,,	11¼	13¾
21-8-1925	Dull.	18¼	17½	17¼	,,	11¼	13½
28-8-1925	,,	18¼	17½	17¼	,,	11	13½
4-9-1925	,,	18	17¼	17	,,	11	13½
18-9-1925	,,	18	17	17	Steady.	11¼	13¾
25-9-1925	Steady	18¼	17¼	17¼	,,	11¼	13¾
2-10-1925	Strong.	18½	17½	17½	,,	11½	14
14-10-1925	Steady.	19	18	18	Quiet.	11¼	13¾
30-10-1925	,,	19	18	18	Quiet, nothing doing.	11½	13¾
6-11-1925	Quiet.	18¾	17¾	17¾	,,	11½	13½
20-11-1925	,,	18¾	17½	17½	Quiet.	10¾	13¼
27-11-1925	,,	18	17	16½	,,	10¾	13½
4-12-1925	Dull	18	17	16½	,,	11	13½
18-12-1925	,,	17½	16½	16	,,	10½	12½
30-12-1925	,,	17½	16½	16	Steady.	10¾	12¾

Statement showing the Variation in Prices of Standard Longcloth and 20s Yarn from month to month since 1910.

Year & Month.	Average price of Longcloth per lb. in annas.	Average price of 20s yarn in annas.
1910		
January	9¼	7⅜
February	9¼	7⅜
March	9¼	7¼
April	9¼	8 1/16
May	10⅛	7⅞
June	10¼	8
July	10	7⅞
August	10	7½
September	10	7¼
October	10	7⅜
November	10	8 1/16
December	10¼	8¼
1911	Not available.	
1912.		
January	10¼	7¾
February	10¼	7⅞
March	10½	8
April	10 13/16	8⅛
May	11	8 3/16
June	11	8¼
July	11	8¼
August	11	8¼
September	11	8¼
October	11	8 1/16
November	11	8¼
December	11	8½
1913	Not available.	
1914.		
January	10	7¾
February	10	7½
March	10	7⅜
April	9½	7¼
May	9½	7¼
June	9⅜	7 5/16
July	9½	7¼
August	9⅜	6⅞
September	9½	5½
October	9½	5½
November	8½	5 3/16
December	8½	5⅜
1915.		
January	8½	5¼
February	8½	5¼
March	8¼	5 7/16
April	9	5⅞
May	9¼	5⅝
June	9¼	5⅝
July	9	5½
August	8⅞	5⅝
September	9	6
October	9¾	7
November	10	6¾
December	10	6¾

Year & Month.	Average price of Longcloth per lb. in annas.	Average price of 20s yarn in annas.
1916.		
January	10¼	7 3/16
February	10¼	7 3/16
March	10¼	7½
April	10¼	7¼
May	10¾	7⅜
June	11	7½
July	11½	7¾
August	12½	8⅜
September	13	9
October	12¾	9½
November	13	9 15/16
December	15	10¾
1917.		
January	14½	10⅞
February	13¾	10½
March	14½	10¾
April	14¾	11
May	14½	10½
June	15½	12
July	17	15
August	18	15
September	18	13⅞
October	20½	14⅜
November	23	14⅞
December	26	17½
1918.		
January	25	18½
February	25	19⅜
March	26½	20½
April	27½	19¾
May	27½	19
June	28½	19½
July	31	22½
August	39	28
September	37½	26½
October	32½	21⅞
November	25⅝	17¾
December	24½	18¾
1919.		
January	29	19⅜
February	27½	18⅝
March	24½	17⅞
April	24	18
May	25	19⅛
June	26½	21
July	27½	22½
August	27½	22
September	24½	20⅛
October	25	23½
November	26¾	25⅜
December	29	25½

Statement showing the Variation in Prices of Standard Longcloth and 20s Yarn from month to month since 1910—*contd.*

Year & Month.	Average price of Longcloth per lb. in annas.	Average price of 20s yarn in annas.
1920.		
January	31	26 7/8
February	29 1/4	26 3/8
March	30	26
April	30 1/4	25 3/8
May	29	23 7/8
June	29 1/4	23 1/4
July	31	24 3/4
August	30 1/2	24 15/16
September	30 1/2	23 3/4
October	29	21 7/8
November	29	22 1/2
December	28 1/4	20
1921.		
January	27 3/4	17 3/8
February	25	15 1/2
March	23 3/4	13 3/8
April	24 1/4	14 3/8
May	25 1/4	16 3/8
June	25 3/4	16 3/8
July	26	17 3/8
August	26 1/2	17 3/8
September	27	18 3/8
October	28 1/2	19 3/8
November	27 3/4	18 1/8
December	26 1/2	19 3/8
1922.		
January	26	18 1/16
February	24 3/4	17
March	26 1/4	17 1/8
April	26	16 7/8
May	26 1/4	17 1/8
June	27	17 1/2
July	27 1/2	17 3/8
August	27 1/4	17 1/16
September	24 1/2	16 1/4
October	23 1/2	16 5/16
November	23	16 3/8
December	22 1/2	15 1/2
1923.		
January	22 1/2	15 11/16
February	23	15 1/4
March	22 1/2	15 7/8
April	21 1/2	15 3/8
May	20 3/4	15 1/4
June	20	15
July	20	15 1/8
August	20	14 7/8
September	20 1/2	15 7/16
October	21	15 11/16
November	23	17 1/8
December	22 1/4	16 1/2
1924.		
January	22 1/2	16 3/8
February	23 1/2	17 7/16
March	23 1/2	17
April	23 1/2	17 3/8
May	23 1/4	17 1/4
June	23	17 3/8
July	23	17 3/8
August	23 1/4	17 3/8
September	22 3/4	17 5/16
October	22 1/2	17 3/8
November	21 1/2	17 1/8
December	21 1/4	16 7/16
1925.		
January	20 1/2	15 3/8
February	20 1/4	14 13/16
March	20 1/2	14 11/12
April	20 1/2	14 11/16
May	20	13 11/16
June	19 1/2	13 1/2
July	18 1/2	13 1/2
August	18 1/4	13 3/8
September	18	13 1/2
October	19	13 3/8
November	18 1/2	13 1/2
December	17 1/2	12 3/8
1926.		
January	17 1/2	12 1/4
February	17 1/2	12 1/2
March	17 1/2	12 1/4
April	18	11 1/2
May	17 1/2	10 7/8
June	17	10 3/4

Quantity (in Pounds) and the Counts of Yarn Spun in Bombay Island and Coorla.

Counts.	Twelve Months, April to March.		
	1922-23.	1923-24.	1924-25.
1	2,364,340	3,269,532	5,241,412
3	2,411,947	2,359,231	2,340,678
6	9,217,887	6,306,809	7,741,278
7	11,331,383	10,059,125	10,155,557
8	6,699,101	6,402,871	8,335,595
9	8,351,484	6,911,042	5,901,454
10	27,496,452	14,220,540	13,413,238
Total 1 to 10 ..	74,226,403	56,122,753	61,163,565
11	29,782,044	11,504,231	16,004,873
12	26,181,291	17,045,964	18,804,856
13	14,460,174	13,088,795	12,112,903
14	11,691,914	10,630,310	13,104,163
16	8,279,391	8,638,205	9,853,205
18	10,873,466	9,827,231	13,055,958
20	61,883,344	47,237,432	60,434,229
Total 11 to 20 ..	171,828,510	125,909,820	156,149,723
21	27,683,402	22,783,414	27,207,738
22	22,557,237	16,874,310	21,910,544
24	28,337,785	22,481,033	29,541,265
26	4,974,028	3,752,250	4,458,803
27	2,565,066	2,352,147	2,708,238
28	3,175,486	2,953,217	4,246,583
30	5,126,254	6,143,870	6,908,149
Total 21 to 30 ..	95,405,789	79,538,076	98,954,678
31	113,552	92,466	273,385
32	2,944,645	2,455,926	3,541,912
33	....	28,002	246,959
34	368,293	549,189	567,876
36	831,643	708,966	775,300
38	72,344	96,094	4,633
40	1,256,312	2,617,650	2,511,384
Total 31 to 40 ..	5,586,789	6,604,846	7,961,384
Above 40 ..	1,027,621	1,337,956	3,212,045
Wastes, etc.	23,992	73,132	101,361
Grand Total ..	348,099,104	269,586,583	327,542,750

Quantity (in pounds) and the Counts (or numbers) of Yarn Spun in Ahmedabad.

Count or Number.	Twelve Months, April to March.		
	1922-23.	1923-24.	1924-25.
1	10,876	14,045	121,277
3	....	69,853	...
6	797	26,801	22,312
7	240,308	183,200	286,104
8	43,499	20,201	674
9	676,244	570,317	615,130
10	784,889	593,352	250,549
Total, Nos. 1 to 10 ..	1,982,716	1,892,330	2,393,836
11	498,962	225,861	214,569
12	969,191	618,278	525,658
13	644,307	1,278,666	2,017,645
14	323,879	386,982	468,668
16	566,378	269,176	702,272
18	3,338,693	1,849,651	1,487,906
20	22,550,449	21,991,725	29,268,131
Total, Nos. 11 to 20 ..	33,783,105	31,387,197	37,263,853
21	7,358,795	5,363,013	9,044,623
22	12,257,908	6,292,784	5,470,537
24	7,638,397	2,825,543	2,623,607
26	2,830,486	3,502,243	3,799,919
27	1,242,454	862,681	1,002,755
28	1,861,455	2,067,344	3,039,949
30	12,581,615	12,671,029	16,802,689
Total, Nos. 21 to 30 ..	48,249,942	36,436,990	45,803,002
31	553,166	191,211	215,005
32	2,860,035	2,950,511	2,165,249
33	217	2,606	348,552
34	221,536	233,717	263,281
36	132,080	56,424	49,962
38	563,430	10,307	125,929
40	1,130,836	1,413,882	1,713,149
Total, Nos. 31 to 40 ..	5,471,816	4,880,197	4,949,685
Above 40 ..	595,296	1,004,832	1,595,849
Wastes, etc. ..	....	709	416
Grand Total ..	90,082,875	75,602,255	92,006,641

Statement showing the quantity (in lbs.) of Yarn

(000's omitted.)

COUNTRIES.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
Bombay Presidency ..	441,521	485,567	479,683	448,556	509,771	482,148
Bombay Island	327,641	363,681	355,025	322,153	376,743	355,899
Ahmedabad	67,586	67,810	68,953	72,488	82,921	80,269
Madras	42,838	44,974	44,674	43,032	44,303	44,187
Bengal	32,625	37,355	33,226	31,709	32,096	28,568
United Provinces	39,487	43,765	44,469	50,281	48,445	44,177
*Ajmer-Merwara	....	....	....	....	3,554	2,576
Punjab	6,631	5,339	6,275	6,814	4,740	3,750
†Delhi	....	....	....	....	2,802	2,703
Central Provinces & Berar..	27,738	33,582	36,553	34,595	37,443	34,338
‡Burma	....	....	....	....	....	....
Total for British India..	590,842	650,582	644,853	614,957	683,155	644,447
Native States	34,189	37,890	37,924	37,028	39,270	36,660
GRAND TOTAL ..	625,030	688,473	682,777	651,985	722,425	681,107

NOTE.—The figures for Bombay Island and Ahmedabad are included in the figures specially intended to illustrate the progress of spinning in these centres.

*Prior to 1915-16 figures for Ajmer-Merwara were included in United Provinces figures.

†Prior to 1915-16 Delhi figures were included in the Punjab.

‡Figures for Burma were available only from 1923-24.

of all Counts Spun in Various Centres in India.

(000's omitted.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
468,972	427,038	439,800	469,945	492,634	497,352	398,552	474,292
357,289	306,190	317,719	342,456	348,695	348,099	269,587	327,543
64,866	73,224	73,544	76,305	85,598	90,083	75,602	92,007
43,093	42,787	44,346	41,241	44,388	53,425	50,939	54,221
32,882	32,507	35,229	33,392	33,626	28,938	26,105	25,675
39,473	34,391	35,181	37,060	40,477	41,470	51,993	56,323
1,817	2,057	1,965	2,031	2,544	2,352	2,981	3,260
3,909	3,020	3,359	2,780	3,564	2,718	1,264	1,761
3,188	2,981	3,287	3,937	2,960	3,804	5,189	6,448
33,466	34,280	34,188	31,270	32,818	31,877	32,258	38,116
....	....	....	....	....	....	843	1,067
626,501	580,561	597,355	621,655	653,011	661,936	570,125	661,162
33,775	34,480	38,405	38,347	40,452	43,958	47,204	58,228
660,576	615,041	635,760	660,003	693,463	705,894	617,329	719,390

shown against Bombay Presidency. The figures of Bombay and Ahmedabad Island are

Statement Showing the Quantity (in Pounds

(000's omitted.)

	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17
BRITISH INDIA AND NATIVE STATES—						
1 to 10	110,179	137,002	130,784	131,010	145,307	110,682
11 to 20	336,331	369,393	361,909	343,326	386,188	369,933
21 to 30	149,332	158,836	166,995	156,240	169,744	171,488
31 to 40	20,281	19,642	19,712	18,701	18,573	24,082
Above 40	2,199	2,938	2,699	2,233	1,963	4,577
Wastes	704	661	979	475	651	346
TOTAL ..	625,030	688,473	682,777	651,985	722,425	4681,107

Statement Showing the Production of Cloth (in yards) of

(000's omitted.)

	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17
Bombay Presidency ..	950,404	1,001,865	941,673	926,589	1,201,490	1,318,810
Bombay Island	622,451	642,102	592,365	562,323	771,266	830,185
Ahmedabad	250,655	270,904	254,174	277,013	332,027	392,025
Madras	25,539	30,910	31,787	30,114	36,685	38,221
Bengal	15,077	20,980	19,361	15,002	14,587	21,414
United Provinces	....	....	....	....	39,348	40,560
Ajmer-Merwara	39,507	45,111	45,764	41,912	5,888	6,840
Punjab	2,063	3,806	3,857	1,913	4,432	4,160
Delhi	....	....	....	....	173	171
Central Provinces & Berar ..	46,370	48,654	51,307	46,363	53,213	60,331
Indian States	57,191	69,316	70,543	73,814	85,697	87,625
TOTAL ..	1,136,152	1,220,443	1,164,292	1,135,708	1,441,515	1,578,133

NOTE.—The figures for Bombay Island and Ahmedabad are included in the figures shown illustrate the progress of weaving in these two centres.

of Yarn Spun in British India and Native States.

(000's omitted.)

1917-18	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
100,452	87,320	84,188	83,943	90,067	102,978	84,843	92,796
346,002	314,541	347,000	359,527	371,452	375,617	327,067	377,915
183,667	189,204	183,657	199,086	203,162	208,959	181,977	223,812
24,389	19,189	17,080	15,024	16,900	15,930	19,667	19,368
5,842	4,555	3,560	2,067	2,389	2,195	3,261	5,822
223	231	275	355	492	214	514	578
660,576	615,040	635,760	660,003	693,463	705 894	617,329	719,390

all kinds in British India and Native States.

(000's omitted.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23	1923-24.	1924-25.
1,361,081	1,197,422	1,352,606	1,304,807	1,455,312	1,418,169	1,364,541	1,564,901
933,138	757,904	863,292	836,507	921,927	870,285	855,883	986,028
313,253	332,157	369,923	349,429	398,954	417,864	375,436	446,383
38,337	41,519	46,414	39,956	35,609	49,524	5,127	56,751
25,775	26,713	27,872	23,843	22,396	17,912	21,644	24,698
37,080	29,359	35,030	36,115	39,865	44.754	45,702	55,617
5,151	5,712	5,275	5,786	7,284	7,302	6,798	8,771
2,950	2,311	1,247	633	568	393	1,646	1,817
1,168	1,438	2,049	2,573	3,175	7,977	10,297	14,511
58,907	59,281	63,957	59,776	61,682	60,837	57,017	72,630
84,577	86,972	105,330	107,363	105,682	118,416	137,783	170,752
1,614,126	1,450,726	1,639,779	1,580,850	1,731,573	1,725,284	1,701,574	1,970,447

against Bombay Presidency but are also given separately as they are specially intended to

Woven Goods Produced in Bombay Island and Coorla.

Description.		Twelve Months, April to March.		
		1922-23.	1923-24.	1924-25.
Grey and bleached piece-goods—				
Chadars	pounds	8,314,545	9,049,600	9,846,500
	yards	25,239,447	24,318,253	25,734,288
Dhutis	pounds	20,434,495	19,445,677	21,115,663
	yards	102,025,169	97,624,467	110,996,543
Drills and jeans	pounds	7,362,499	7,771,330	11,311,884
	yards	31,522,794	33,293,809	49,906,678
Cambrics and lawns	pounds	331,508	273,166	447,042
	yards	2,185,687	1,559,771	2,442,682
Printers	pounds	305,681	65,168	33,033
	yards	1,673,693	280,456	164,919
Shirtings and longcloth	pounds	63,537,339	61,959,117	71,844,535
	yards	289,340,232	278,940,228	326,482,134
T-cloth, domestics and sheetings.	pounds	9,743,082	8,358,453	9,692,334
	yards	48,426,838	39,457,238	45,033,825
Tent cloth	pounds	803,860	560,748	930,634
	yards	1,923,911	1,487,982	2,261,293
Khadi, Dungri or Khaddar (*a*).	pounds	....	....	10,808,805
	yards	....	....	30,573,950
Other sorts	pounds	14,860,417	15,189,164	2,794,659
	yards	44,980,321	45,896,753	11,548,972
Total	pounds	125,693,426	122,672,423	138,825,089
	yards	547,318,092	522,858,957	605,145,284
Coloured piece-goods	pounds	66,771,093	68,722,694	78,161,540
	yards	322,966,426	333,024,098	380,883,020
Grey and coloured goods other than piece-goods.	pounds	2,171,404	1,585,266	1,851,483
	dozens	487,332	349,414	420,010
Hosiery	pounds	110,486	96,436	90,534
	dozens	96,271	81,316	83,396
Miscellaneous	pounds	1,299,289	990,056	1,347,738
Cotton goods mixed with silk or wool.	pounds	99,274	139,418	115,201
Grand Total	pounds	196,144,972	194,206,293	220,391,585
	yards	870,284,518	855,883,055	986,028,304
	dozens	583,603	430,730	512,406

(*a*) Separately specified with effect from April, 1924.

Woven Goods Produced in Ahmedabad.

Description.		Twelve Months, April to March.		
		1922-23.	1923-24.	1924-25.
Grey and bleached piece-goods—				
Chadars	pounds	6,067,289	5,167,740	4,752,163
	yards	20,167,864	17,350,368	16,272,284
Dhutis	pounds	42,144,673	35,681,304	39,536,072
	yards	203,247,266	169,913,924	189,624,778
Drills and jeans ..	pounds	327,468	305,955	267,962
	yards	1,473,759	1,350,489	1,113,993
Cambrics and lawns ..	pounds	233,619	94,643	122,447
	yards	1,889,763	598,478	894,041
Printers	pounds	3,756,038	2,857,030	2,811,764
	yards	15,335,582	11,775,345	11,647,192
Shirtings and longcloth ..	pounds	23,812,510	18,674,396	22,772,429
	yards	109,659,757	88,520,317	108,329,530
T-cloth, domestics and sheetings..	pounds	2,084,792	2,016,041	2,159,784
	yards	11,126,680	10,896,224	12,048,985
Tent cloth	pounds	29,921	268,977	1,104,936
	yards	257,929	838,700	3,042,048
Khadi, Dungri or Khaddar (*a*)	pounds	....	....	3,200,746
	yards	....	....	10,046,672
Other sorts	pounds	4,543,105	4,921,097	2,346,240
	yards	18,230,484	20,235,477	12,303,889
Total ..	pounds	82,999,415	69,987,183	79,074,543
	yards	381,389,084	321,479,322	365,323,412
Coloured piece-goods	pounds	6,495,590	9,341,479	14,238,865
	yards	36,475,227	53,956,487	81,059,633
Grey and coloured goods other than piece-goods ..	pounds	10,177	9,222	9,596
	dozens	10,265	6,507	12,123
Hosiery	pounds	78,755	83,681	94,736
	dozens	24,298	25,379	27,356
Miscellaneous	pounds	23,625	47,656	262,017
Cotton goods mixed with silk or wool	pounds	10,692	8,832	7,903
Grand Total ..	pounds	89,618,254	79,478,053	93,687,660
	yards	417,864,311	375,435,809	446,383,045
	dozens	34,563	31,886	39,479

Woven Goods Produced in British India and Indian States.

Description.		Twelve Months, April to March.		
		1922-23.	1923-24.	1924-25.
Grey and bleached piece-goods—				
Chadars	pounds	20,670,655	20,236,823	21,645,841
	yards	63,201,941	58,002,928	61,613,927
Dhutis	pounds	91,908,343	85,658,495	96,507,081
	yards	431,145,066	399,214,392	458,404,088
Drills and jeans ..	pounds	14,448,441	13,931,287	18,520,699
	yards	56,306,342	54,973,538	77,191,047
Cambrics and lawns	pounds	897,056	776,541	1,144,509
	yards	5,553,948	3,648,582	5,395,238
Printers	pounds	9,078,063	7,854,527	7,759,658
	yards	39,073,014	34,830,964	32,776,886
Shirtings and long-cloth.	pounds	105,606,729	100,314,738	118,058,747
	yards	470,549,111	443,847,952	525,524,427
T-cloth, domestics and sheetings.	pounds	17,853,498	15,608,050	17,462,522
	yards	81,001,523	68,074,639	77,741,758
Tent cloth	pounds	2,866,753	2,794,585	4,156,226
	yards	6,588,145	6,573,369	9,893,789
Khadi, Dungri or Khaddar (*a*).	pounds	....	....	29,434,466
	yards	....	....	87,152,562
Other sorts ..	pounds	37,036,002	39,874,932	10,575,504
	yards	118,370,604	128,487,900	46,674,718
Total ..	pounds	300,365,540	287,049,978	325,265,253
	yards	1,271,789,694	1,197,654,173	1,382,368,440
Coloured piece-goods ..	pounds	98,634,845	108,330,343	125,580,102
	yards	453,494,493	503,920,182	588,078,412
Grey and coloured goods other than piece-goods.	pounds	3,422,967	2,575,352	2,953,886
	dozens	1,212,640	514,307	611,439
Hosiery	pounds	464,371	547,831	672,850
Miscellaneous ..	dozens	205,765	244,539	276,726
Cotton goods mixed with silk or wool ..	pounds	2,201,290	2,237,111	3,949,303
	pounds	164,726	207,229	272,006
Grand Total ..	pounds	105,253,739	*401,660,958	458,693,400
	yards	1,725,284,187	1,701,574,355	1,970,446,852
	dozens	1,418,405	758,846	888,165

*Includes lbs. 66,652 for which details by classes are not available.

(*a*) Separately specified with effect from April, 1924.

Value of Goods Woven in Indian Cotton Mills.

	Twelve Months, April to March.		
	1922-23.	1923-24.	1924-25.
British India.	Rs.	Rs.	Rs.
Bombay	48,63,00,516	42,50,81,350	47,19,51,050
Madras	2,40,08,985	2,51,72,904	2,62,86,538
Bengal	60,28,391	67,76,904	75,29,681
United Provinces	1,81,34,802	1,66,31,358	2,01,58,960
Ajmer-Merwara	25,97,942	24,79,913	27,42,766
Punjab	1,66,410	4,56,609	5,32,932
Delhi	38,72,441	41,99,020	58,43,145
Central Provinces, Berar ..	2,44,04,439	2,00,45,754	2,62,82,362
Total ..	56,55,13,926	50,08,43,812	56,13,27,434
Foreign Territory.			
Indian States of Mysore, Baroda, Nandgaon, Bhavnagar, Wadhwan, Hyderabad, Gwalior (Ujjain), and Pondicherry ..	2,81,25,618	2,87,41,173	3,34,61,676
Grand Total ..	59,36,39,544	52,95,84,985	59,47,89,110

Prices of Imported and Indian-made Piece-Goods.

Year.	Average Price per yard. Imported Piece-goods.	Indian Mill-made Piece-goods.	Difference.	Proportionate Prices of Imported and Indian-mill-made Piece-goods.
	As. p.	As. p.	As. p.	Price=100.
1912-13 ..	2 9 5/6	2 2⅓	0 7½	76%
1913-14 ..	2 10 9/10	2 2¾	0 8 3/20	77%
1914-15 ..	2 9½	2 1	0 8¾	74%
1915-16 ..	2 9¾	1 7½	1 2¼	57%
1916-17 ..	3 9¼	1 4½	2 4¾	37%
1917-18 ..	5 1⅓	2 3 1/5	2 10 2/5	44%
1918-19 ..	6 11	4 6	2 5	65%
1919-20 ..	7 8½	4 7	3 1½	59%
1920-21 ..	8 11	7 1	0 10	80%
1921-22* ..	6 4	5 6	0 10	87%
1922-23* ..	6 6	5 8	1 10	87%

*Calculated from latest approximate returns.

Approximate Yarn Sales by Bombay Mills in India (in Millions of lbs.).

Year ending 31st March	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.
Production of yarn in Bombay	353	358	330	320	328	364	355	322	377	356	357	306	318	342	349	348	279	328
Exports of yarn to foreign countries from Bombay	208	225	212	174	142	192	186	128	152	166	117	63	137	78	78	56	38	39
Weight of cloth produced	110	107	126	133	144	149	139	133	184	193	214	177	195	186	207	196	194	220
Weight of yarn used in the manufacture of cloth (1)	100	97	113	120	130	135	125	120	166	173	193	159	176	167	186	176	175	198
Quantity of Bombay spun yarn put on the Indian Market (1A)	45	30	51	26	56	37	41	74	59	17	47	84	5	97	85	116	57	96
Net imports of foreign yarn into India (2) ..	36	41	39	32	41	49	43	42	39	28	18	36	12	47	56	58	43	55

(1) Allowing 15 per cent. for size and 5 per cent. for Waste.
(1A) Is equal to production (*minus* exports *plus* yarn used in production of cloth).
(2) Total Imports *minus* Re-exports.

Approximate Cloth Sales by Bombay Mills in India (in Millions of yards).

Year ending 31st March	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.
Production of Bombay mills	472	456	532	563	622	642	592	562	771	830	933	738	863	837	922	870	850	986
Exports of Indian piece-goods from Bombay	52	56	69	75	57	60	61	45	84	214	159	118	161	115	127	121	126	143
Mill made piece-goods sold in India by Bombay Mills (*a*)	420	400	463	488	565	582	531	517	687	616	774	640	702	722	795	749	739	843
Total net imports of foreign piece-goods into India (*b*)	2,468	1,943	2,141	2,241	2,362	2,919	3,099	2,384	2,077	1,794	1,439	986	975	1,431	1,906	1,503	1,406	1,746

(*a*) Production *minus* Exports.
(*b*) Imports *minus* Re-exports.

Approximate Yarn Sales by All-India Mills (in Millions of lbs).

Year ending 31st March	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.
Production of yarn by Indian mills	638	657	627	610	625	688	683	652	722	681	661	615	635	660	693	705	617	719
Exports of yarn from India	216	233	227	183	151	204	198	134	160	169	122	64	152	83	81	57	39	37
Weight of cloth produced in Indian Mills ..	189	192	229	246	267	285	274	277	352	377	381	350	384	367	403	405	402	459
Weight of yarn used on the manufacture of cloth*	170	173	206	221	240	257	247	249	317	339	343	315	346	330	363	365	362	413
Quantity of Indian mill-made yarn put up in the Indian market	252	239	194	206	234	217	238	269	245	173	196	236	137	247	249	283	216	269
Net imports of foreign yarn into India † ..	36	41	39	32	41	49	43	42	39	28	18	36	12	47	56	58	43	55

* See footnote (1) on page 394.
† See footnote (2) on page 394.

Approximate Cloth Sales in India by Indian Mills (in Millions of yards).

Year ending 31st March	1908.	1909.	1910.	1911.	1912.	1913.	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.
Production of Indian Mills ..	808	824	964	1,045	1,136	1,220	1,164	1,136	1,441	1,578	1,614	1,451	1,640	1,381	1,725	1,725	1,701	1,970
Exports of Indian piece-goods from India	74	78	94	100	81	86	89	67	113	244	189	149	196	146	161	157	165	181
Indian mill-made piece-goods put on the Indian market	734	746	870	943	1,055	1,134	1,075	1,069	1,328	1,334	1,425	1,302	1,444	1,435	1,591	1,568	1,536	1,789
Total net imports of foreign piece-goods	2,469	1,943	2,141	2,240	2,363	2,919	3,098	2,384	2,077	1,795	1,438	983	975	1,439	1,006	1,503	1,406	1,746

Imports of Raw Cotton from

(In Bales of 3¼ cwts. each).

COUNTRIES.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
United Kingdom	92	68	12	..	..	..
Other British Possessions ..	2	2	2	22	4	10
Total, British Empire ..	94	70	14	22	4	10
Egypt	2	2	2	2	..	..
Other Foreign Countries ..	42	96	2	..	2	..
Total, Foreign Countries ...	44	98	4	2	2	..
GRAND TOTAL ..	138	168	16	24	7	10

Egypt from 1915-16 is

Exports of Indian Mill-made Yarn to Countries

(Quantities in lbs.)

COUNTRIES.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
United Kingdom	879	670	302	455	2,278	2,301
Aden and Dependencies ..	2,253	2,085	1,507	1,450	2,416	515
Straits Settlements (including Labuan)	4,485	4,576	4,787	4,786	4,565	4,776
Hongkong	55,934	94,346	94,719	63,689	70,584	66,232
Other British Possessions & Mandated Territories ..	1,188	898	666	643	6,169	8,053
Total, British Empire ..	64,739	102,575	101,981	71,025	86,012	81,967
Italy	....	....	....	2	132	10
*Turkey (European and Asiatic)	7,600	6,441	7,259	4,597	82	182
†Syria	....	....	....	....	....	....
Other Native States in Arabia	254	197	49	79	104	1,194
Persia	1,587	1,874	1,805	1,768	2,579	5,482
Java	1,018	238	247	90	707	1,027
Siam	168	287	324	514	828	1,108
China	73,363	89,603	83,257	52,982	69,380	77,594
‡Egypt	1,769	2,108	1,654	1,526	....	....
Other Foreign Countries ..	991	1,239	1,402	1,127	428	446
Total, Foreign Countries.	86,750	101,387	95,997	62,595	74,220	87,013
GRAND TOTAL ..	151,489	203,961	197,978	133,619	160,232	168,980

* Mesopotamia and Iraq were included in Turkey until 1921-22 and have been included

† Included in Turkey up to 1921-22.

‡Prior to 1915-16 shown as a foreign country.

different Countries into India.

(000's omitted.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
..	..	..	30	70	16	..	8
10	22	16	18	62	36	56	94
10	22	16	48	132	52	56	102
..	..	..	..	..	..	..	..
4	4	4	6	8	10	16	14
4	4	4	6	8	10	16	18
14	26	20	54	140	62	72	116

included in British Possessions.

within the British Empire and outside the British Empire.

(000's omitted.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
632	505	655	655	63	150	848	509
1,044	2,888	1,517	2,579	2,591	2,722	2,245	2,853
3,810	2,616	4,057	3,785	2,698	1,679	1,416	831
46,290	32,065	59,925	40,023	44,428	38,397	19,814	14,288
8,920	5,382	7,709	4,441	6,453	5,483	1,500	2,002
60,696	43,456	73,803	51,483	56,233	48,431	25,823	20,483
3	....	....	....	....	6	....	....
552	731	4,907	129	....	...	487	369
....	....	....	....	1,141	1,680	2,133	2,376
263	163	38	54	130	85	49	105
2,426	1,133	3,196	2,689	3,249	2,177	2,315	3,228
501	614	267	828	173	39	81	57
1,172	493	953	789	1,757	1,186	1,228	1,429
55,899	16,735	60,625	23,403	17,557	2,663	920	207
....	....	....	....	....	....	4,593	6,667
286	473	2,021	3,161	792	594	903	1,611
61,102	20,342	78,007	31,053	24,800	8,430	12,709	16,049
121,798	63,798	151,870	82,535	81,033	56,861	38,531	36,532

in other British Possessions and Mandated Territories since that time.

Export of Indian Mill-made Cloth from India to

(Quantities are given in Yards.)

	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17
United Kingdom	310	219	128	84	154	7
Aden	11,346	11,946	7,143	10,472	19,424	63,250
Mesopotamia	....	....	....	....	....	....
Bahrein Islands	2,200	1,527	734	1,092	2,379	6,841
Ceylon	8,624	9,642	9,354	6,804	9,876	10,650
Strait Settlements (including Labuan)	12,973	15,287	17,948	14,058	17,722	20,511
Hongkong	318	147	316	106	43	52
Natal	167	135	88	60	175	1,193
Zanzibar and Pemba ..	1,432	772	720	475	1,194	6,431
Kenya Colony and East African Protectorate ..	3,867	5,178	4,746	3,364	6,013	24,297
Tanganyika Territory * ..	....	....	....	....	....	....
Mauritius and Dependencies	1,858	2,256	1,536	2,359	4,073	2,647
Other British Possessions and Mandated Territories	795	627	1,133	511	6,112	10,583
TOTAL BRITISH EMPIRE..	43,890	47,736	43,835	40,276	67,165	146,462
Netherlands	....	....	....	....	....	....
Turkey (European and Asiatic) †	8,222	8,288	829	4,603	13,672	30,702
Muscat Territory	1,635	1,808	1,317	1,372	1,842	3,337
Other Native States in Arabia	1,576	780	370	205	1,219	6,800
Persia	6,887	5,881	7,609	5,766	13,573	52,191
Sumatra	101	333	495	573	1,480	998
Java	10	46	54	134	194	286
Siam	3,594	4,551	4,913	3,927	4,598	6,307
China	212	1,131	655	71	365	252
Egypt	2,657	1,778	....	....	....	....
Portuguese East Africa ..	4,320	5,325	5,087	4,626	6,046	9,108
Italian East Africa ..	1,024	743	912	713	2,777	4,874
Other Foreign Countries ..	7,301	8,113	23,248	4,928	534	2,528
TOTAL FOREIGN COUNTRIES	37,539	38,777	45,390	26,918	46,300	117,383
GRAND TOTAL ..	81,429	86,513	89,234	67,194	113,465	263,845

* Tanganyika included in other foreign countries until 1921-22.

† Mesopotamia and Iraq were included in Turkey until 1921-22 and have been included in other

NOTE.—Prior to 1915-16 Egypt had been classified as a foreign country.

Countries within the British Empire and Outside.

(000's omitted.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
81	159	135	130	14	30	58	346
16,985	16,010	14,998	17,415	8,413	6,465	6,256	5,826
....	....	....	....	35,878	32,839	40,790	48,893
5,188	2,318	3,780	1,956	2,701	5,337	4,670	6,379
11,202	12,981	17,991	15,157	18,352	17,131	16,205	16,006
17,923	19,185	20,075	20,561	20,083	21,762	23,431	21,268
37	22	20	60	2	4	4	2
2,221	5,715	505	3,181	3,560	915	1,554	1,135
2,825	1,524	3,137	3,457	3,694	3,787	3,350	3,505
5,742	5,623	9,619	8,923	6,212	7,855	6,270	7,145
....	....	....	....	4,081	3,590	4,219	6,803
3,420	5,068	1,397	2,444	2,156	3,069	1,961	1,616
13,453	3,288	14,809	6,818	4,441	5,221	4,204	4,866
79,077	72,493	86,466	80,102	109,587	108,005	112,972	123,790
....	....	....	....	4	....	....	....
30,407	30,188	52,360	69	....	5	9	27
3,806	3,468	3,765	3,192	2,751	4,096	3,393	3,110
3,758	1,274	4,221	1,236	6,716	5,531	3,953	3,434
57,682	28,472	34,411	18,624	30,208	27,641	27,544	33,148
1,357	343	368	172	165	179	110	464
715	364	330	577	335	159	963	1,707
5,252	1,167	5,680	2,695	2,895	1,858	1,928	2,096
76	....	615	88	23	37	55	76
....	....	....	....	....	....	....	....
3,794	6,385	4,369	4,445	6,811	8,277	8,377	9,363
1,473	288	699	1,566	1,139	575	1,243	1,471
2,053	4,648	3,271	33,599	333	588	4,78	2,825
110,373	76,596	110,089	66,263	51,380	48,946	52,356	57,721
189,450	149,088	196,555	146,365	160,967	156,951	165,329	181,511

British Possessions and Mandated Territories since that time.

Statement Showing the Quantity of Yarn Imported

(Quantity in lbs.)

COUNTRIES:	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
United Kingdom	37,377	43,787	37,836	37,395	36,941	24,476
Aden and Dependencies ..	....	1	2	....	1	12
Ceylon	52	178	83	180	615	638
Straits Settlements	11	2	7	2	5	10
Hongkong	3	4	78	7	....	....
Other British Possessions & Mandated Territories ..	....	....	65	....	....	....
Total, British Empire ..	37,443	43,972	38,071	37,584	37,562	25,136
Germany	283	492	302	177	4	25
Netherlands	1,338	2,054	1,561	1,984	909	242
Belgium	250	452	164	162	21	....
Switzerland	1,288	1,246	1,275	824	631	92
Italy	541	977	1,042	857	590	26
China (excluding Hongkong)	2	....	....	10	....	....
Japan	587	384	1,000	922	702	4,008
Other Foreign Countries ..	227	548	756	344	8	9
Total, Foreign Countries ..	4,516	6,063	6,100	5,280	2,865	4,393
GRAND TOTAL ..	41,959	50,035	44,171	42,864	40,427	29,530

Quantity of Yarn Spun in India, Imports from and Exports to

(For twelve months, April to March.)

	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
Total Indian Mill Production	625	688	683	652	722	681
Less Export	151	204	198	134	160	169
Balance	474	484	485	518	562	512
Imports from Foreign Countries	42	50	44	43	40	30
TOTAL	516	534	529	561	602	542
Less Re-Exports	1	1	1	1	1	2
Balance consumed in India.	515	533	528	560	601	540
Cloth produced in India in millions of lbs	267	285	274	277	352	377
Approximately equivalent in yarn to (allowing 15 per cent. size and 5 per cent. waste)	240	257	247	249	317	339
Real balance of yarn available for sale in India ..	275	276	281	311	284	201
Millions of Spindles ..	6.4	6.5	6.6	6.8	6.8	6.8

*2 months' strike in Bombay mills

into British India from different Countries.

(000's omitted.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
14,947	9,612	12,230	23,396	49,074	31,018	21,790	20,759
....	....	....	....	9	....	....	....
12	14	52	114	62	3	149	163
54	4	....	15	87	21	1	2
....	89	338	450	43	64	68	1
....	34	187	15	17	1	....	....
15,013	9,753	12,807	23,990	49,292	31,107	22,007	20,925
....	....	....	....	12	32	48	4
....	....	8	145	463	394	383	561
....	....	....	134	130	61	57	90
145	4	70	417	829	724	982	1,097
19	....	115	208	407	312	391	215
....	1,058	160	2,285	22	80	140	399
4,206	27,280	1,918	20,123	14,915	26,547	20,430	32,325
17	....	19	31	55	17	136	291
4,387	28,342	2,290	23,343	16,833	28,167	22,567	34,982
19,400	38,095	15,097	47,333	57,125	59,274	44,575	55,907

Foreign Countries and the Balance available for Consumption in India.

(Quantity shown in million pounds.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
661	615	635	660	693	705	*617	719
122	64	152	83	81	57	39	37
539	551	483	577	612	648	578	682
19	38	15	47	57	59	45	56
558	589	498	624	669	707	623	738
1	2	3	..	1	1	2	1
557	587	495	624	668	706	621	737
381	350	384	367	493	405	402	459
343	315	346	330	363	365	362	413
214	272	149	294	305	341	259	324
6.7	6.7	6.7	6.8	6.9	7.9	7.9	8.3

and 6 weeks' strike in Ahmedabad.

Counts of different kinds of Cotton

(Quantity in Pounds.)

	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
GREY—						
1s to 10s ..	68	180	97	79	113	29
11s to 15s ..	45	108	43	46	69	99
16s to 20s ..	79	816	511	68	131	614
21s to 25s ..	25	406	227	34	71	5
26s to 30s ..	2,908	2,546	2,845	4,732	3,587	884
31s to 40s ..	9,797	10,665	8,833	9,255	8,454	4,800
41s to 50s ..	2,356	2,585	3,062	2,892	2,731	1,580
Above 50s	3,498	3,926	3,479	2,886	2,997	2,117
51s to 60s ..	....	....	....	....	....	....
61s to 100s ..	....	....	....	....	....	....
Above 100s	....	....	....	....	....	....
GREY TWO FOLDS (Doubles)	....	....	....	....	....	....
WHITE (BLEACHED) ..	....	....	....	....	....	....
COLOURED NOS.—						
1s to 20s ..	707	1,204	603	283	519	562
21s to 25s ..	625	1,433	669	305	436	583
26s to 30s ..	857	909	842	617	739	497
31s to 40s ..	14,760	17,275	14,825	14,238	12,834	11,218
41s to 50s ..	526	999	451	521	904	587
Above 50s	751	1,258	876	722	880	602
COLOURED TWO FOLDS (Doubles)	....	....	....	....	....	....
MERCERISED COTTON YARN	....	....	....	1,819	1,175	1,742
UNSPECIFIED DESCRIPTION.	4,957	5,724	6,818	4,368	4,788	3,609
TOTAL (Twist and Yarn) ..	41,959	50,035	44,171	42,864	40,427	29,530

Yarn Imported into India.

(000's omitted.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
16	99	41	216	91	89	107	99
63	99	114	148	55	36	102	81
70	7,660	182	6,993	6,555	12,652	6,377	6,629
23	....	32	128	900	449	231	168
446	1,927	331	3,430	4,063	4,650	893	677
2,255	2,805	2,079	13,885	19,035	21,061	12,943	21,383
1,413	3,316	1,961	1,429	2,517	2,131	2,078	1,983
1,340	2,718	....	(See classifications below)			....	....
....	....	767	1,776	2,708	1,772	2,490	3,123
....	....	1,143	851	2,742	1,957	2,403	1,997
....	....	50	37	135	123	137	114
....	....	840	3,183	4,974	4,063	3,434	5,023
....	....	1,077	2,040	2,520	1,894	2,650	3,427
205	132	120	234	260	292	271	361
355	461	308	304	319	352	242	309
155	136	136	321	174	58	100	257
7,810	3,980	4,773	8,958	7,705	5,596	6,684	6,305
403	221	92	455	221	5	68	50
408	480	478	473	558	235	503	391
....	....	448	1,060	772	490	598	810
1,135	902	470	1,280	794	1,320	2,019	2,664
3,297	3,161	353	127	24	49	4	57
19,400	38,095	15,997	47,333	57,125	59,274	44,575	55,907

Total Quantity of Imports of Piece-goods

(Quantity in Yards.)

Countries.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
United Kingdom	2,379,479	2,941,899	3,104,311	2,378,048	2,049,488	1,786,138
Ceylon	307	242	238	377	691	569
Other British Possessions ..	3,832	2,686	2,179	916	2,185	1,887
Total, British Empire.	2,383,618	2,944,827	3,106,728	2,379,341	2,052,364	1,788,594
Germany	3,436	5,043	6,732	1,247	218	25
Holland	22,991	26,186	24,622	20,926	20,998	14,441
Belgium	3,781	5,203	7,362	2,251	447	56
Switzerland	4,408	4,903	5,953	3,150	4,481	3,071
Italy	6,999	11,668	22,743	10,210	13,079	14,267
China (excluding Hongkong)	36	12	37	96	224	1,297
Japan	623	5,881	8,900	16,042	39,102	100,123
United States of America ..	9,037	15,813	10,310	11,557	16,955	11,431
Other Foreign Countries ..	2,964	2,999	3,742	842	234	222
Total, Foreign Countries.	54,275	77,702	90,401	66,321	95,737	144,927
Grand Total ..	2,437,893	3,022,529	3,197,129	2,445,662	2,148,100	1,933,522

Re-exports of different kinds

(Quantity in Yards.)

Piece-goods.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
Grey (unbleached)	4,089	4,982	4,584	2,704	4,335	27,906
White (bleached)	10,263	9,495	8,818	6,212	9,210	19,648
Coloured, Printed or Dyed.	61,164	52,736	48,618	22,264	27,873	49,641
Fents of all descriptions ..	....	96	66	26	1	75
Total ..	75,516	67,309	62,086	35,206	41,419	97,324

into British India from Abroad.

(000's omitted.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
1,429,629	867,058	976,128	1,291,763	955,999	1,453,409	1,318,804	1,613,987
108	204	93	170	132	470	783	1,637
2,192	2,256	6,946	1,702	4,680	2,694	3,218	4,834
1,431,929	869,518	983,167	1,293,635	959,911	1,456,573	1,322,805	1,620,458
23	....	....	209	98	205	933	1,613
6,137	1,139	7,673	13,494	12,029	13,160	10,956	11,710
....	....	62	2,812	240	143	850	931
1,267	521	1,001	4,102	740	2,561	7,383	7,390
7,095	1,322	1,395	19,024	2,349	1,957	5,800	10,258
1,168	10	14	916	739	2,775	6,055	4,859
94,656	288,261	75,954	170,340	90,276	107,778	122,667	155,303
12,741	10,905	9,571	13,458	23,252	7,808	7,424	9,357
404	302	1,310	734	174	335	954	1,361
123,580	252,457	97,581	216,084	129,889	136,722	163,021	202,782
1,555,509	1,121,975	1,080,748	1,509,720	1,089,800	1,593,295	1,485,826	1,823,240

of Piece-goods from India.

(000's omitted.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
33,856	41,361	38,279	34,659	49,079	51,752	41,137	32,964
13,223	25,070	19,004	7,319	8,837	6,732	6,652	6,663
37,965	47,698	31,304	18,992	15,735	16,021	13,278	14,628
24	71	65	21	27	66	10	58
85,063	114,200	88,652	60,991	73,672	74,571	61,078	54,312

Statement Showing the Quantity of Piece-goods Produced in Countries and the Balance Avail

(For twelve months April to March.)

Grey and Bleached Goods.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
Total Indian Mill Production	883.3	914.1	872.4	880.5	1,094.8	1,136.1
Less Exports	40.4	44.3	44.1	33.1	54.1	139.0
Balance	842.9	869.8	828.3	847.4	1,040.7	997.1
Imports	1,848.2	2,303.8	2,327.4	1,924.4	1,759.6	1,436.7
Total	2,691.1	3,173.6	3,155.7	2,771.8	2,800.3	2,433.8
Less Re-exports	14.2	14.3	13.3	8.9	13.5	47.5
Balance consumed in India	2,676.9	3,159.3	3,142.4	2,762.9	2,786.8	2,386.3
Coloured, Printed or Dyed:						
Total Indian Mill Production	252.7	306.2	291.8	255.2	346.6	441.9
Less Exports	40.9	42.0	45.0	34.0	59.0	104.7
Balance	211.8	264.2	246.8	221.2	287.6	337.2
Imports	589.4	682.2	831.7	494.7	358.7	454.9
Total	801.2	946.4	1,078.5	715.9	646.3	792.1
Less Re-exports	61.1	52.7	48.6	26.2	27.8	49.6
Balance consumed in India	740.1	893.7	1,029.9	689.7	618.5	742.5
All Classes.						
Total Indian Mill Production	1,136.0	1,220.3	1,164.2	1,135.7	1,441.4	1,578.0
Less Exports	81.3	86.3	89.1	67.1	113.1	243.7
Balance	1,054.7	1,134.0	1,075.1	1,068.6	1,328.3	1,334.3
Imports	2,437.6	2,986.0	3,160.1	2,419.1	2,118.3	1,891.6
Total	3,492.3	4,120.0	4,235.2	3,487.7	3,446.6	3,225.9
Less Re-exports	75.3	67.0	61.9	35.1	41.3	97.1
Balance consumed in India	3,417.0	4,053.0	4,173.3	3,452.6	3,405.3	3,128.8
Number of Looms in Thousands	85	89	94	104	108	110

India, Imports from Foreign Countries, Exports to Foreign able for Consumption in India.

(Quantity shown in millions of yards.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
1,141.0	1,076.7	1,164.3	1,129.8	1,284.7	1,271.7	1,197.6	1,382.3
78.7	55.6	76.8	50.1	25.1	32.1	35.2	45.0
1,062.3	1,021.1	1,087.5	1,079.7	1,259.6	1,239.6	1,162.4	1,337.3
1,127.7	870.0	855.3	1,001.9	941.7	1,333.4	1,119.2	1,394.0
2,190.0	1,891.1	1,942.8	2,081.6	2,201.3	2,573.0	2,281.6	2,731.3
47.0	66.3	57.2	41.9	57.8	58.4	47.7	40.0
2,143.0	1,824.8	1,885.6	2,039.7	2,143.5	2,514.6	2,233.9	2,691.3
473.1	374.0	475.7	450.9	466.8	453.4	503.9	588.0
110.6	93.3	119.5	96.1	135.7	124.7	129.9	136.0
362.5	280.7	356.2	354.8	331.1	328.7	374.0	452.0
395.5	227.3	208.2	489.2	138.2	243.7	347.4	406.0
758.0	508.0	564.4	844.0	469.3	572.4	721.4	858.0
37.9	47.6	31.3	18.9	15.7	16.6	13.2	14.0
720.1	460.4	533.1	825.1	453.6	556.4	708.2	844.0
1,614.1	1,450.7	1,640.0	1,580.7	1,751.5	1,725.1	1,701.5	1,970.3
189.3	148.9	196.3	146.2	160.8	156.8	165.1	181.0
1,424.8	1,301.8	1,443.7	1,434.5	1,590.7	1,568.3	1,536.4	1,789.3
1,523.2	1,097.3	1,063.5	1,491.1	1,079.9	1,577.1	1,466.6	1,800.0
2,948.0	2,399.1	2,507.2	2,925.6	2,670.6	3,145.4	3,003.0	3,589.3
84.9	113.9	88.5	60.8	73.5	74.4	60.9	54.0
2,863.1	2,285.2	2,418.7	2,864.8	2,597.1	3,071.0	2,942.1	3,535.3
115	116	118	119	124	135	145	151

Excise Duties Paid on Indian-made Piece-goods.

The following table shows the amount paid in Excise Duties by Cotton Mills in India since the date of imposition :—

Years.	Excise Duty Realised from Goods woven in Cotton Mills in India.		Quantity of Woven Goods produced in India.	
	Gross.	Net.	Millions of yards.	Millions of lbs.
	Rs.	Rs.		
1896-97	11,45,200	11,13,454	Yardage not available from returns.	83
1897-98	12,14,108	11,86,848		91
1898-99	14,27,246	14,05,216		102
1899-00	13,80,526	13,50,306		98
1900-01	12,64,787	12,11,431		99
1901-02	18,31,079	17,77,965		120
1902-03	19,31,754	18,91,010		122
1903-04	21,36,510	20,95,151		138
1904-05	24,49,145	24,00,976		159
1905-06	27,90,239	27,54,516		164
1906-07	29,82,671	29,46,515	708	166
1907-08	34,97,216	34,53,443	808	189
1908-09	36,58,276	36,12,977	824	192
1909-10	41,43,892	40,98,719	964	229
1910-11	44,56,129	44,01,707	1,043	246
1911-12	50,61,974	49,86,971	1,136	267
1912-13	58,39,147	57,97,745	1,220	268
1913-14	56,77,256	56,01,064	1,164	274
1914-15	51,74,091	51,65,345	1,136	258
1915-16	51,15,846	50,30,382	1,442	331
1916-17	47,08,749	46,27,726	1,578	378
1917-18	80,05,559	79,30,932	1,614	381
1918-19	1,43,24,924	1,41,87,143	1,451	350
1919-20	1,64,05,268	1,61,45,449	1,640	384
1920-21	2,40,58,772	2,38,37,729	1,581	367
1921-22	2,29,24,345	2,22,35,647	1,731	404
1922-23	1,98,87,349	1,85,76,139	1,725	405
1923-24	1,69,20,363	1,66,37,043	1,700	401

Imports of British Piece-goods and Yarns into Bombay, Calcutta and Madras.

Statement of Imports of Piece-goods of British Manufacture (Grey, Bleached, Coloured and Printed) and of Yarns (Grey, and Dyed) from Great Britain into Bombay, Calcutta and Madras, from the year 1900 to 1924 :—

Year.	Piece-goods.		
	Bombay. Yards.	Calcutta. Yards.	Madras. Yards.
1900	461,938,302	1,086,463,274	120,383,837
1905	637,039,600	1,292,516,900	119,829,700
1910	624,859,600	1,129,898,600	109,976,800
1911	622,516,400	1,226,065,400	138,414,300
1912	658,026,700	1,451,819,200	173,698,700
1913	804,333,100	1,547,872,400	210,797,700
1914	617,498,700	1,378,930,300	160,552,000
1915	354,966,900	1,052,246,400	106,332,200
1916	481,857,500	1,035,437,900	88,153,700
1917	851,853,300	898,872,200	78,886,500
1918	429,754,300	449,044,800	33,046,000
1919	275,575,100	423,290,200	37,684,300
1920	569,054,700	656,277,100	69,872,000
1921	265,737,000	744,049,100	50,486,100
1922	410,565,000	854,974,300	77,837,700
1923	476,873,200	797,622,700	89,096,800
1924	553,405,800	938,652,800	91,324,300

	Yarn.		
	Bombay. Lbs.	Calcutta. Lbs.	Madras. Lbs.
1900	5,892,081	9,435,371	9,496,085
1905	11,368,420	11,443,550	10,175,810
1910	8,410,140	6,384,450	6,891,410
1911	12,842,440	9,179,460	8,364,340
1912	13,298,110	11,913,170	10,745,130
1913	13,628,700	7,519,860	9,497,740
1914	13,538,110	9,985,330	8,280,700
1915	15,423,650	8,974,950	10,801,200
1916	8,931,510	5,922,490	7,583,020
1917	5,185,900	5,646,600	6,295,900
1918	2,054,500	2,211,400	3,490,800
1919	3,217,300	2,491,100	3,201,100
1920	10,850,000	5,096,900	6,011,600
1921	18,383,900	7,573,200	7,257,800
1922	21,204,800	7,284,200	7,471,600
1923	9,024,500	5,154,800	5,978,300
1924	9,281,600	4,280,600	5,613,800

Statement showing the Various Classes

(Quantities given in Yards.)

Description.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
Piece-goods—						
Grey, Unbleached (Plain and Bordered).						
Chadars	2,422	3,812	2,800	3,161	1,784	1,647
Dhuties, Saris, etc. ..	575,385	724,089	806,067	666,236	610,338	520,161
Drills and Jeans ..	19,359	28,767	21,288	18,903	23,187	21,171
Flannels	....	....	....	....	....	....
Jaconets & Madapollams.	116,860	142,900	150,364	111,472	101,609	82,935
Longcloth	497,790	622,134	545,388	514,540	406,478	184,919
Printers	210	433	60	....	....	....
Sheetings	213	1,740	151	742	1,833	35,092
T-cloth and Domestics ..	4,627	10,268	6,377	4,544	2,177	121
Unspecified Sorts ..	1,985	1,887	1,695	637	752	944
Total ..	1,218,832	1,535,129	1,534,189	1,320,235	1,148,247	846,990
White, Bleached—						
Chadars	1,244	1,847	2,973	1,937	689	1,538
Checks, Spots & Stripes .	11,741	13,087	16,101	9,576	12,751	11,169
Dhuties, Saris, etc. ..	62,649	73,392	104,343	103,179	51,967	63,496
Drills and Jeans ..	7,507	7,201	5,752	5,198	6,632	6,880
Flannels	....	....	....	....	....	....
Jaconets, etc.	173,959	226,243	307,851	212,547	176,081	183,101
Lawns	....	....	....	....	....	....
Longcloth and Shirting.	155,961	179,894	115,259	115,896	163,430	123,180
Mulls	....	....	....	....	....	....
Nainsooks	191,846	235,870	204,757	134,893	170,762	168,986
Sheetings	205	205	208	189	347	205
T-cloth and Domestics ..	12	14	11	27	15	8
Twills	3,554	5,604	8,268	6,387	10,874	9,128
Unspecified Sorts ..	20,930	25,402	28,123	14,191	17,858	22,082
Total, White, Bleached.	629,608	768,758	793,345	604,221	611,405	589,833
Coloured, Printed or Dyed—						
Cambrics	101,483	101,604	113,586	72,680	41,495	48,716
Chadars	292	147	289	208	136	24
Checks, Spots & Stripes .	....	10,849	19,722	10,164	9,510	17,218
Dhuties, Lungis and Sarongs	29,645	38,370	40,915	24,253	22,527	24,807
Drills and Jeans	20,863	22,523	29,908	20,008	19,593	20,090
Flannels	....	....	....	....	....	....
Prints and Chintz ..	135,314	178,856	209,709	104,644	85,943	106,872
Saris and Scarves ..	65,789	74,913	74,259	75,509	34,082	39,567
Shirtings	86,541	108,190	152,574	76,681	55,759	64,121
Twills	27,230	26,695	31,374	17,536	12,127	16,505
Unspecified Sorts ..	122,276	117,064	159,352	93,602	77,566	116,985
Total ..	589,433	682,212	831,770	494,775	358,739	454,959
Fents of all kinds ..	....	36,430	37,824	26,430	26,709	41,740

of Piece-goods imported into British India.

(000's omitted.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24	1924 25.
263	1	296	439	367	634	730	831
398,001	304,314	348,193	291,255	383,411	506,657	432,658	489,881
7,575	23,673	9,811	17,616	16,123	14,275	16,802	17,282
36	19	....	2	....	412	6	61
62,730	48,909	40,764	39,061	55,176	83,594	72,983	89,407
122,847	159,611	114,484	181,893	129,364	280,131	119,036	206,741
....	....	....	....	....	....	....	13
30,272	53,793	17,778	46,358	50,164	44,516	60,742	39,361
2,815	2,696	1,564	2,942	398	584	510	531
936	403	451	642	605	221	488	1,394
625,475	583,420	533,341	580,208	635,608	931,025	703,956	845,502
679	273	419	479	396	414	487	718
5,172	1,312	3,939	8,950	1,542	5,793	8,458	11,024
41,623	35,797	37,913	35,672	31,944	44,959	45,693	68,896
3,301	4,447	3,259	6,315	2,023	3,140	3,421	6,347
390	17	19	367	11	52	38	35
13,549	4,424	10,314	11,624	5,737	7,118	8,292	9,294
....	5,929	4,157	8,666	4,688	8,679	7,698	9,193
113,337	65,940	77,328	108,521	48,163	69,365	67,215	122,724
151,218	129,483	109,600	93,911	138,314	159,134	164,657	185,629
150,193	27,134	59,128	121,718	67,551	90,752	88,468	105,367
739	219	214	260	38	135	220	153
46	246	6	4	....	....	17	1
6,974	2,255	6,207	13,409	3,349	6,382	7,275	13,342
15,133	9,258	9,543	11,888	2,410	6,569	13,419	16,152
502,353	286,635	322,047	421,784	306,167	402,492	415,357	548,876
50,759	29,267	29,440	54,357	17,701	36,186	44,139	44,472
7	6	19	22	1	4	2	58
11,341	5,331	5,643	13,588	3,657	6,474	8,512	15,446
11,938	5,394	11,098	16,278	11,344	17,676	12,776	15,238
22,797	16,856	7,009	19,335	9,628	16,049	17,213	25,349
9,672	4,175	1,294	9,744	1,413	1,610	3,900	6,302
100,986	70,025	48,905	114,722	28,735	44,689	61,529	59,533
28,608	17,320	14,125	38,177	15,944	19,166	32,655	30,772
60,838	24,703	27,985	71,571	25,015	38,231	47,605	69,317
23,465	10,812	7,524	31,179	5,753	9,289	16,810	22,243
75,182	43,429	55,254	120,283	19,089	54,415	98,253	118,240
395,594	227,319	208,296	489,256	138,279	243,789	347,493	406,971
32,086	24,600	17,964	18,472	9,746	15,989	19,020	21,882

Exports of Indian-grown Raw

(In bales of 3¼ cwts. each.)

COUNTRIES.	1911-12.	1912-13.	1913-14.	1914-15.	1915-16.	1916-17.
United Kingdom ..	120	88	110	202	238	236
Ceylon	2	2	2	2	2	2
Hongkong	12	22	32	30	24	16
Australian Commonwealth	2	2	2	1	2	..
Other British Possessions. .	2	..	..	1	..	..
Total, British Empire	140	114	146	236	268	254
Russia	..	6	8	16	2	..
Sweden	2	..	2	8	6	..
Germany	254	272	482	354	..	..
Holland	2	6	8	4	..	..
Belgium	220	246	324	226	..	..
France	84	94	150	158	58	78
Spain	36	24	48	64	68	72
Italy	194	166	242	386	322	276
Austria-Hungary	134	114	214	178	..	..
China (exclusive of Hongkong)	14	34	23	42	84	84
Japan	1,004	1,020	1,376	1,272	1,090	1,758
U. S. of America	4	6	8	8	10	4
Other Foreign Countries ..	6	2	4	4	22	22
Total, Foreign Countries.	1,954	1,990	2,890	2,720	2,262	2,292
GRAND TOTAL ..	2,094	2,110	3,036	2,930	2,530	2,546

Figures in this table refer

Cotton from India.

(000's omitted.)

1917-18.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.	1923-24.	1924-25.
324	79	152	98	30	195	296	165
4	3	3	4	3	5	7	3
8	6	13	14	8	3	1	..
2	..	..	2	..	..	1	..
..	3	2	..	1	1	1	1
337	92	170	117	48	204	306	169
..	..	..	..	..	..	..	..
..	..	1	2	1	3	2	3
..	..	50	205	240	268	249	173
..	..	15	12	5	10	42	39
..	..	146	148	292	257	261	205
46	10	58	39	58	129	178	137
4	1	44	79	31	67	89	98
158	126	158	217	157	246	562	495
..	..	9	35	34	44	43	8
20	9	75	181	438	594	274	290
1,482	799	1,691	968	1,792	1,657	1,757	1,705
8	2	18	10	9	22	43	33
25	12	28	14	36	17	34	38
1,750	959	2,287	2,000	3,003	3,224	3,534	3,224
2,088	1,051	2,457	2,118	3,050	3,428	3,840	3,393

to Indian Cotton *only*.

Year.	Yarn Exports to China including Hongkong from Japan in lbs.	Yarn Exports to China including Hongkong from India in lbs.	Yarn Exports from Japan to India in lbs. *
1903	118,806,266	232,412,908	2,133
1904	95,163,733	235,961,880	....
1905	96,020,266	229,107,329	32,666
1906	99,788,933	282,095,892	6,000
1907	79,479,066	223,425,598	158,533
1908	56,311,200	160,312,294	16,400
1909	95,796,266	208,047,448	6,000
1910	127,759,066	200,295,056	2,802,669
1911	98,896,933	158,839,789	723,466
1912	133,312,663	129,296,816	395,466
1913	69,331,333	183,348,529	1,299,866
1914	208,499,200	177,976,588	1,257,466
1915	211,664,666	116,671,082	625,866
1916	196,215,733	139,963,879	4,697,733
1917	165,992,400	143,795,340	3,725,066
1918	177,714,666	102,188,900	31,770,666
1919	76,759,733	48,800,500	1,901,200
1920	90,027,066	126,550,093	19,045,800
1921	92,318,000	63,425,529	14,865,600
1922	118,502,133	61,984,616	27,327,866
1923	64,670,400	41,059,562	23,574,933
1924	63,211,733	20,733,610	32,336,133

* These figures are for years ending 31st December.

The Textile Industry in Japan.

Year.	Total Spindles excluding doubling Spindles.	Total Looms.	Total production of Yarn in Bales of 400 lbs.	Total production of Piecegoods in Yards.	Exports of Yarn in Bales.	Total consumption of Raw Cotton in lbs.	Total consumption of Indian Cotton in lbs.	Total consumption of American Cotton in lbs.
1903* ..	1,381,306	5,043	801,737.5	76,702,215	307,201	390,243,253	220,058,084	66,841,125
1904 ..	1,345,585	5,085	695,213.0	80,947,348	257,307	328,826,008	145,470,175	37,289,983
1905 ..	1,426,594	8,140	905,536.5	114,908,132	267,383	423,290,500	218,531,242	124,278,875
1906 ..	1,472,253	9,601	945,167.5	137,773,415	267,348	444,273,500	213,902,368	119,326,058
1907 ..	1,540,452	9,462	983,481.5	135,253,029	226,472	460,114,658	265,737,875	111,216,408
1908 ..	1,795,879	11,146	878,570.5	147,443,838	167,842	423,242,941	230,701,058	95,674,700
1909 ..	1,954,892	13,813	1,025,244.5	181,976,972	258,878	489,402,625	306,535,475	105,293,050
1910 ..	2,099,754	17,702	1,134,780.5	226,313,958	347,633	543,392,025	372,808,800	69,456,508
1911 ..	2,170,796	20,431	1,129,267.0	289,039,671	285,009	539,264,825	297,788,250	111,540,908
1912 ..	2,176,748	21,898	1,352,209.5	342,584,684	374,933	636,231,816	368,062,933	214,251,250
1913 ..	2,414,499	24,224	1,517,982.0	416,725,357	468,736	712,138,691	434,685,666	262,441,016
1914 ..	2,657,174	25,443	1,666,181.0	454,901,674	569,990	783,857,433	548,868,658	170,397,933
1915 ..	2,807,514	30,068	1,720,264.5	502,076,621	575,891	807,821,216	559,329,525	209,035,492
1916 ..	2,875,904	31,295	1,925,579.0	560,181,108	547,147	895,586,900	593,978,108	235,615,875
1917 ..	3,060,478	36,181	1,923,841.5	594,649,419	470,852	905,943,675	590,521,080	242,144,925
1918 ..	3,227,678	40,391	1,808,866.0	656,935,420	421,512	853,228,175	453,072,641	280,374,975
1919 ..	3,488,262	44,401	1,920,782.5	739,390,012	230,333	897,553,824	376,648,588	355,589,221
1920 ..	3,813,580	50,588	1,816,976.0	762,037,360	304,925	852,916,315	482,831,418	310,370,399
1921 ..	4,161,126	54,994	1,811,350.0	700,697,985	292,260	860,546,824	521,998,441	304,763,617
1922 ..	4,517,612	60,765	2,228,246.0	869,327,652	394,062	1,047,879,775	615,242,183	389,759,225
1923 ..	4,197,966	61,421	2,171,153.0	1,000,708,890	248,342	1,019,702,633	652,798,508	296,423,592
1924 ..	4,870,232	64,225	2,072,817.5	1,030,905,658	270,359	969,013,700	563,969,233	282,197,025

* Year ending 31st December, in all cases.

China and Japan : Comparative Tables.

Piece-goods Exports from Japan to India. Value in Yen. †	Piece-goods Exports from Japan to China. Value in Yen. †	Piece-goods Exports from India to China including Hongkong. Quantity in Yards. †	Piece-goods Exports from India to China including Hongkong. Value in Rupees. †
56,528	2,983,591	2,609,416	333,496
107,354	3,068,399	1,118,091	162,162
45,857	4,606,791	10,342,734	1,566,427
40,588	8,161,351	13,300,860	1,980,121
45,397	4,718,474	1,490,983	226,278
43,314	4,534,201	1,545,493	229,410
54,452	6,727,632	4,400,910	631,320
81,371	10,078,043	5,995,099	841,035
111,832	10,128,091	2,279,693	323,595
732,478	12,717,303	529,840	92,625
1,031,906	18,964,913	1,277,635	203,520
1,727,442	26,188,612	970,559	158,470
3,793,475	27,331,680	177,174	32,490
10,560,119	34,783,962	408,555	56,210
15,121,454	84,804,372	304,269	41,280
55,435,718	88,047,516	113,064	28,920
29,507,929	143,283,813	21,952	2,470
67,289,100	130,515,786	635,163	294,690
30,465,794	100,987,683	148,168	78,810
33,507,336	108,757,681	24,870	19,638
36,546,103	100,292,315	40,866	19,734
46,916,136	137,920,952	58,333	31,904

† Excluding cotton towels, handkerchiefs and cotton blankets.

The Textile Industry in India.

Year.	Total Spindles.	Total Looms.	Total production of yarn in Bales of 400 lbs. each.	Total production of Piecegoods in Yards. †	Exports of Yarn in Bales of 400 lbs. each.	Total exports of Piecegoods from India in Yards.	Tota consumption of Raw Cotton by Mills in lbs.
	Year ending 30th June.	Year ending 30th June.	Year ending 31st March.	Year ending 31st March.	Year ending 31st March.	Year ending 31st March.	Year ending 30th June.
1903 ..	5,043,297	44,092	1,440,586	406,316,717	621,346	69,534,540	687,821,280
1904 ..	5,118,121	45,337	1,444,054	460,554,273	631,188	75,815,129	683,948,272
1905 ..	5,163,486	50,139	1,445,953	549,529,065	619,636	87,456,469	736,663,648
1906 ..	5,279,585	52,668	1,702,296	546,990,190	744,085	91,974,962	793,218,272
1907 ..	5,333,275	58,436	1,634,251	708,139,870	608,792	76,898,937	776,226,640
1908 ..	5,756,020	67,920	1,595,738	808,426,561	538,939	74,127,955	780,668,000
1909 ..	6,053,231	76,898	1,642,075	824,489,164	588,672	77,988,994	826,728,000
1910 ..	6,195,671	82,725	1,568,410	963,869,482	568,411	94,137,558	768,527,920
1911 ..	6,357,460	85,352	1,524,318	1,042,741,653	458,582	99,788,315	747,999,472
1912 ..	6,463,929	88,951	1,562,575	1,136,151,590	378,722	81,429,410	803,639,984
1913 ..	6,596,862 Year ending 31st Aug.	94,136	1,721,182	1,220,442,545	509,963	36,512,812	821,638,272 Year ending 31st Aug.
1914 ..	6,778,895	104,179	1,706,942	1,164,291,588	494,945	89,233,716	840,105,392
1915 ..	6,848,744	108,009	1,629,961	1,135,707,952	334,048	67,194,430	823,231,744
1916 ..	6,839,877	110,268	1,806,061	1,441,514,550	400,579	113,465,214	861,505,456
1917 ..	6,738,697	114,021	1,702,768	1,579,132,789	422,450	263,845,251	881,680,288
1918 ..	6,653,871	116,484	1,851,439	1,614,126,458	304,494	189,449,666	810,585,776
1919 ..	6,689,680	118,221	1,537,601	1,450,726,160	159,464	149,088,495	801,338,160
1920 ..	6,763,076	119,012	1,589,400	1,639,779,227	379,675	196,554,975	755,208,656
1921 ..	6,870,804	123,783	1,650,006	1,580,849,746	206,338	146,364,793	831,130,160
1922 ..	7,331,219	134,620	1,733,929	1,731,573,296	202,583	160,966,778	856,087,680
1923 ..	7,927,938	144,794	1,764,733	1,725,284,187	142,153	156,951,235	843,465,616
1924 ..	8,313,273	151,485	1,521,569	1,700,397,693	96,328	165,328,567	751,757,216

† Excluding blankets, handkerchiefs, shawls and fents.

Japanese Goods

Statement Showing Prices ex-Mills of Certain Principal Qualities and

Quality Numbers.	Class of goods.	Dimensions.	Count of		Reed.	Picks.	No. of Warp ends.
			Warp.	Weft.			
44000	Shirting.	$44 \times 38 \times 6\frac{3}{4}$	40s	44s	2/56	48	2,720
36210	Do.	$38 \times 38 \times 5\frac{7}{8}$	36s	46s	2/56	56	2,350
AAAA	Do.	$36 \times 40 \times 12\frac{1}{2}$	24s	24s	2/60	64	2,360
"Asli"	Do.	$36 \times 40 \times 12$	24s	20s	2/60	64	2,360
"Toyo"	Do.	$36 \times 40 \times 12$	24s	20s	2/64	64	2,520
	Do.	$36 \times 40 \times 5\frac{1}{2}$	30s	36s	2/52	42	2,050
	Grey Drill.	$30 \times 40 \times 13\frac{1}{2}$	14s	14s	3/40	42	1,940
3938 Gosho	Shirting.	$38 \times 38\frac{1}{2} \times 10$	30s	30s	64	60	2,680
9999 Japan Cotton ..	Do.	$44 \times 38\frac{1}{2} \times 10\frac{1}{2}$	30s	36s	68	68	3,290
3640 Gosho. ..	Sheeting.	$36 \times 40 \times 13\frac{1}{2}$	14s	14s	40	44	1,600
Wakayama Mfg. Co., Ltd.	Shirting.	$36 \times 40 \times 12$	24s	24s	60	64	2,380

Japanese Competition : Imports into India.

IMPORTS OF COTTON PIECE-GOODS AND YARN INTO INDIA FROM JAPAN.

YEAR.	Piece-goods. Yards.	Yarn. Lbs.	YEAR.	Piece-Goods. Yards.	Yarn. Lbs.
1896-97	26,888	10	1910-11	154,413	316,117
1897-98	10,413	10	1911-12	622,861	586,677
1898-99	9,394	150	1912-13	5,880,723	384,429
1899-1900	24,768	140	1913-14	8,900,578	1,000,260
1900-01	22,076	128,140	1914-15	16,042,064	921,730
1901-02	34,827	....	1915-16	39,101,998	701,929
1902-03	24,934	....	1916-17	100,122,516	4,007,635
1903-04	308,988	2,080	1917-18	94,655,510	4,206,491
1904-05	344,897	....	1918-19	238,128,138	27,280,386
1905-06	260,097	33	1919-20	75,952,374	1,917,956
1906-07	178,180	57	1920-21	170,322,948	20,122,709
1907-08	99,866	110	1921-22	90,275,210	14,915,009
1908-09	111,739	120	1922-23	107,778,096	26,546,905
1909-10	76,808	40	1923-24	121,901,749	20,430,025

in Bombay.

Prices at which Similar Goods imported from Japan are sold in Bombay.

Tape length in yds.	Size per cent.	Production in 10 hrs.	Cost per Piece.	Selling Price.	Japanese price in bazar.	Less 2½ per cent selling Comm. & 1 per cent. Brokerage, etc.	Less 11 per cent. duty.	Nett C.I.F. price of Japanese Goods.
		lbs. ozs.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.	Rs. a. p.
40	28	7 8	9 10 3	11 1 7	....	....	....	....
40	12	6 0	9 8 11	11 2 5	....	....	....	....
42	40	10 8	12 7 7	14 6 6	13 0 0	12 0 0	1 4 0	11 5 9
43	42	10 8	12 3 9	14 1 6	13 0 0	12 0 0	1 4 0	11 5 9
43	34	10 8	12 8 0	14 5 9	14 0 0	13 0 3	1 5 6	12 3 9
42½	11	8 0	7 11 7	8 13 5	7 0 0	6 12 8	0 10 9	6 1 11
44	16	20 0	10 6 9	11 8 4	13 0 0	12 0 0	1 4 0	11 5 9
40½	40	10 6	10 12 11	12 5 8	12 8 0	12 2 0	1 3 3	10 14 9
40½	17	9 2	13 4 3	15 2 7	15 0 0	14 8 9	1 7 1	13 1 8
43½	28	18 11	10 4 5	13 6 11	12 0 0	11 10 3	1 2 6	10 7 9
42½	34	11 7	12 9 9	15 11 10	....	....	....	....

Shipments of Country-made Yarn from Bombay to China and Japan.

From Dec. to Jany.	To China (Bales, 400 lbs. each).	To Japan (Bales, 400 lbs. each).	Total Bales.	From Dec. to Jany.	To China (Bales, 400 lbs. each).	To Japan (Bales, 400 lbs. each).	Total Bales.
1891 ..	3,65,038	10,939	3,75,977	1908 ..	4,41,899	..	4,41,899
1892 ..	3,85,771	21,445	4,07,216	1909 ..	5,10,746	..	5,10,746
1893 ..	2,97,572	14,198	3,11,770	1910 ..	4,24,893	..	4,24,893
1894 ..	3,38,703	10,743	3,49,446	1911 ..	2,75,087	..	2,75,087
1895 ..	3,74,119	2,515	3,76,634	1912 ..	4,33,989	..	4,33,989
1896 ..	4,71,023	2,467	4,73,490	1913 ..	4,05,359	..	4,05,359
1897 ..	3,61,221	645	3,61,866	1914 ..	3,24,586	..	3,24,586
1898 ..	4,37,645	475	4,38,120	1915 ..	3,58,777	..	3,58,777
1899 ..	5,79,619	250	5,79,869	1916 ..	3,03,692	..	3,03,692
1900 ..	2,53,331	100	2,53,431	1917 ..	2,86,365	107	2,86,472
1901 ..	5,36,195	..	5,36,195	1918 ..	1,08,568	..	1,08,568
1902 ..	5,55,487	..	5,55,487	1919 ..	2,70,058	389	2,70,447
1903 ..	6,04,044	..	6,04,044	1920 ..	1,75,688	..	1,75,688
1904 ..	4,60,316	3	4,60,319	1921 ..	1,52,911	10	1,52,921
1905 ..	6,51,870	..	6,51,870	1922 ..	1,18,970	..	1,18,970
1906 ..	5,96,926	500	5,97,426	1923 ..	58,241	..	58,241
1907 ..	4,12,127	200	4,12,327	1924 ..	31,161	..	31,161

Japan's Cotton

Years.	Indian.		American.		Chinese.		Egyptian.	
	lbs.	Bales of 300 kin.	lbs.	Bales of 375 kin.	lbs.	Bales of 400 kin.	lbs.	Bales of 550 kin.
1903 ..	220,058,084	550,145	66,841,125	133,682	81,711,917	153,209	8,308,958	11,330
1904 ..	145,470,175	363,675	37,289,983	74,578	127,976,550	239,940	7,346,125	10,017
1905 ..	215,531,242	538,828	124,278,875	248,558	70,662,350	132,492	7,365,525	10,044
1906 ..	213,902,368	534,756	119,326,058	238,652	97,386,216	182,599	6,718,950	9,162
1907 ..	265,737,875	664,345	111,216,408	222,438	67,479,692	126,524	7,008,467	9,557
1908 ..	230,701,058	576,753	95,674,700	191,349	76,140,575	142,764	9,406,175	12,826
1909 ..	306,535,475	766,339	105,293,050	210,586	53,332,225	99,998	13,087,891	17,847
1910 ..	372,808,800	933,092	69,456,508	140,156	79,219,308	146,910	11,374,717	15,509
1911 ..	297,798,250	744,496	111,540,908	223,082	110,200,125	206,625	13,506,525	18,418
1912 ..	368,062,933	920,155	214,251,250	428,537	31,654,633	59,350	15,086,558	20,573
1913 ..	434,685,666	1,086,713	202,441,016	404,881	46,621,309	87,414	16,699,942	22,772
1914 ..	549,868,658	1,374,672	170,397,933	340,797	36,528,292	68,491	15,161,483	20,674
1915 ..	559,320,525	1,398,301	209,035,492	418,073	18,389,108	34,482	13,436,266	18,323
1916 ..	593,976,108	1,484,945	235,615,875	471,233	29,506,075	55,324	16,421,546	22,393
1917 ..	590,521,080	1,476,303	242,144,925	484,290	42,305,808	79,323	14,717,091	20,069
1918 ..	453,072,641	1,132,681	280,374,975	560,750	83,091,375	155,796	14,769,342	20,140
1919 ..	376,648,588	941,621	355,589,221	711,178	130,970,193	245,569	15,588,908	21,258
1920 ..	482,881,416	1,207,203	310,370,393	620,740	30,684,616	57,533	11,558,208	15,761
1921 ..	521,998,441	1,305,005	304,763,617	609,597	3,037,340	5,695	14,600,500	19,910
1922 ..	615,242,183	1,491,844	389,759,225	780,344	3,626,017	7,724	19,652,842	27,036
1923 ..	652,798,508	1,663,509	296,423,592	592,515	25,836,858	48,444	22,140,542	30,191
1924 ..	563,989,233	1,407,838	282,197,025	564,390	58,888,450	110,418	36,176,192	60,715

NOTE.—Korean Cotton before 1918 is

Japan's Cotton Yarn Production and Operatives.

Year.	Average working Spindles.	Production of Cotton Yarn.						Daily Operatives in average.	
		Coarse Yarn.	Medium Yarn.	Fine Yarn.	Doubling.	Gassed.	Total.	Male.	Female.
		Bales	Bales	Bales	Bales	Bales	Bales		
1903 ..	1,297,966	701,250.5	42,570.5	51.5	37,887.5	19,977.5	801,737.5	14,295	59,336
1904 ..	1,249,086	610,931.5	33,786.0	106.5	32,266.5	18,122.5	695,213.0	11,451	50,220
1905 ..	1,329,404	792,439.0	50,104.0	157.0	42,584.0	20,252.5	905,536.5	12,812	58,634
1906 ..	1,404,714	826,363.0	55,125.0	148.0	43,376.5	20,155.0	945,167.5	14,496	61,278
1907 ..	1,458,020	859,214.5	53,762.0	—	47,377.5	23,127.5	983,481.5	15,242	64,377
1908 ..	1,367,631	738,659.0	54,171.0	—	59,355.5	26,185.0	878,570.5	15,049	59,154
1909 ..	1,569,080	841,778.0	78,975.0	7.0	71,651.0	32,833.5	1,025,244.5	16,844	66,664
1910 ..	1,741,168	964,675.0	63,637.5	1,814.5	74,434.5	30,217.0	1,134,780.5	18,266	75,614
1911 ..	1,784,064	934,713.0	82,739.5	4,627.5	74,536.0	32,651.0	1,129,267.0	17,628	74,868
1912 ..	1,984,191	1,090,172.5	119,893.5	6,722.5	95,683.5	39,737.5	1,352,209.5	18,421	80,779
1913 ..	2,167,926	1,212,001.5	142,409.0	8,666.5	109,996.0	44,909.0	1,517,982.0	19,707	88,038
1914 ..	2,369,801	1,350,850.5	149,498.0	7,760.5	119,790.0	38,282.0	1,661,181.0	22,163	92,251
1915 ..	2,463,376	1,360,259.0	187,761.0	8,096.5	130,536.5	33,611.5	1,720,264.5	22,674	92,500
1916 ..	2,757,299	1,458,617.0	259,840.0	10,153.5	155,483.5	41,485.0	1,925,579.0	23,845	97,279
1917 ..	2,850,637	1,421,978.0	287,259.5	7,730.5	164,850.0	42,023.5	1,923,841.5	25,518	97,648
1918 ..	2,936,495	1,245,723.5	366,868.5	7,427.5	138,286.5	45,560.0	1,808,866.0	26,790	95,069
1919 ..	3,179,568	1,285,926.0	422,967.5	9,202.0	156,542.5	46,144.5	1,920,782.5	30,935	101,399
1920 ..	3,191,753	1,222,525.5	401,868.5	7,477.5	146,562.5	38,542.0	1,816,976.0	33,966	109,782
1921 ..	3,162,353	1,276,000.5	346,148.5	6,199.5	141,136.0	41,265.5	1,811,350.0	34,904	105,704
1922 ..	3,967,285	1,557,052.0	429,484.5	7,167.5	185,761.5	48,780.5	2,228,246.0	41,609	132,441
1923 ..	4,079,855	1,484,705.5	449,274.5	10,175.0	177,472.5	49,525.5	2,171,153.0	38,159	121,812
1924 ..	4,115,692	1,320,986.5	499,037.5	13,497.5	184,539.0	54,757.0	2,072,817.5	36,015	117,307

Consumption.

Annam and Saigon.		Korean.		Sundries.		Total.	
lbs.	Bales of 300 kin.	lbs.	Bales of 200 kin.	lbs.	Bales of 300 kin.	lbs.	Bales.
7,206,191	18,015	—	—	6,116,958	15,292	390,243,233	881,673
6,290,700	15,727	—	—	4,452,475	11,103	328,826,008	715,040
2,621,333	6,553	—	—	2,831,175	7,078	423,290,500	943,553
2,688,083	6,720	—	—	4,251,825	10,692	444,273,500	982,581
5,027,208	12,568	—	—	3,645,008	9,113	460,114,658	1,044,545
7,154,158	17,885	—	—	4,166,275	10,415	423,242,941	951,992
6,366,292	15,916	—	—	4,787,692	11,969	489,402,625	1,122,855
4,823,383	11,829	—	—	5,909,009	13,522	543,592,025	1,261,018
1,837,833	4,595	—	—	4,321,184	10,636	539,204,825	1,207,852
3,735,384	9,307	—	—	3,441,058	8,598	636,231,816	1,446,515
7,547,250	18,869	—	—	4,143,508	10,358	712,138,691	1,631,007
4,742,225	11,857	—	—	7,158,842	17,897	783,857,433	1,834,398
2,641,083	6,604	—	—	4,998,742	12,497	807,821,216	1,888,280
9,069,166	22,673	6,744,540	25,289	4,251,590	10,629	895,586,900	2,092,486
3,715,905	9,290	8,194,558	30,730	4,344,308	10,861	905,943,675	2,110,866
3,187,334	7,968	11,790,775	44,215	6,941,733	17,354	853,228,175	1,938,904
2,265,292	5,663	11,454,470	42,954	5,037,182	12,593	897,553,824	1,980,836
2,041,258	5,104	9,412,820	35,298	5,367,604	13,419	852,316,315	1,955,058
3,923,158	9,808	8,744,408	32,792	3,479,358	8,699	860,546,824	1,991,506
5,563,967	12,873	8,354,600	30,196	5,680,941	14,163	1,047,879,775	2,363,750
2,519,492	6,295	12,054,233	45,182	7,929,408	19,808	1,019,702,633	2,405,944
1,461,775	3,656	20,443,692	76,865	5,877,333	14,694	969,013,700	2,238,376

totalled under "Sundries."

Japan's Cotton Piece-goods Production and Operatives.

(Sub-Work by Spinners Only.)

Years.	Average Working Looms.	Cotton Piece-goods Produced.	Yarn Consumed.	Daily Operatives in average.		
				Male.	Female.	Total.
		yards.	lbs.			
1903 ..	4,963	76,702,213	20,771,345	657	4,253	4,910
1904 ..	4,891	80,947,348	22,484,284	662	4,776	5,438
1905 ..	6,420	114,908,132	30,454,146	989	6,847	7,836
1906 ..	8,491	137,773,415	40,702,848	1,248	7,937	9,185
1907 ..	9,245	135,253,029	44,262,958	1,525	8,727	10,252
1908 ..	9,496	147,443,838	47,076,427	1,484	8,683	10,167
1909 ...	11,585	181,976,972	57,388,586	1,871	11,496	13,367
1910 ..	14,011	226,313,958	71,197,654	2,486	13,604	16,090
1911 ..	17,884	289,039,671	82,498,136	2,656	17,133	19,789
1912 ..	20,208	342,584,684	93,562,721	2,795	18,006	20,801
1913 ..	23,299	416,725,357	111,159,616	3,298	21,956	25,254
1914 ..	24,911	454,901,674	123,863,966	3,569	22,459	26,028
1915 ..	27,687	502,076,621	124,632,631	3,547	22,930	26,477
1916 ..	30,110	560,181,108	136,413,408	3,737	23,245	26,982
1917 ..	31,920	594,649,419	142,770,758	4,333	24,434	28,767
1918 ..	36,365	656,935,420	160,301,569	5,532	29,713	35,245
1919 ..	40,969	739,390,012	179,788,560	7,635	37,040	44,675
1920 ..	44,635	762,037,360	189,651,320	8,005	39,048	47,053
1921 ..	44,109	700,697,985	179,427,501	7,078	32,182	39,260
1922 ..	51,033	869,327,652	214,327,505	7,857	38,102	45,959
1923 ..	52,972	1,000,708,890	240,979,975	7,962	40,549	48,511
1924 ..	56,351	1,030,905,658	241,319,095	8,179	43,056	51,235

Years.	Imports.			
	Raw Cotton.	Cotton Yarn.	Cotton Goods.	Total.
	Yen.	Yen	Yen.	Yen.
1903	69,526,247	790,286	11,232,869	81,525,402
1904	73,439,174	343,290	9,824,496	83,606,870
1905	110,623,183	1,701,866	19,293,252	131,618,301
1906	82,661,859	4,059,342	19,845,097	107,103,298
1907	115,641,599	4,020,304	18,549,651	136,121,554
1908	90,256,289	1,335,700	18,769,091	110,361,140
1909	108,397,788	961,478	14,907,512	124,176,778
1910	159,221,868	344,187	14,595,543	174,161,538
1911	147,102,717	684,403	15,076,862	162,863,982
1912	201,247,999	630,732	10,395,568	212,274,299
1913	234,402,786	465,838	10,800,657	245,729,281
1914	220,496,198	215,623	5,857,458	226,587,279
1915	218,502,159	171,451	5,167,616	223,841,226
1916	277,571,398	253,397	4,711,122	282,535,917
1917	334,079,291	552,335	4,088,928	339,320,554
1918	522,631,857	892,943	7,121,751	530,646,551
1919	674,501,984	5,512,417	8,396,555	688,470,956
1920	727,365,425	4,453,289	17,074,816	748,893,521
1921	438,172,816	1,768,340	10,938,794	449,979,950
1922	427,840,891	2,155,853	15,393,768	445,390,512
1923	513,172,458	2,207,531	8,888,530	524,268,519
1624	605,274,734	3,421,587	11,865,865	620,562,186

Progress of Cotton Mill Companies in Japan.

Years.	Companies.	Mills.	Paid-up Capital.	Reserve Funds.	Total Spindles.	Doubling Spindles.	Looms.
			Yen.	Yen.			
1903 ..	51	—	34,029,216	5,123,892	1,381,306	126,976	5,943
1904 ..	49	—	33,486,730	6,888,594	1,345,585	121,076	5,685
1905 ..	49	—	33,503,700	9,531,622	1,426,594	134,840	8,140
1906 ..	47	—	38,433,350	15,380,948	1,472,253	136,866	9,601
1907 ..	42	118	57,531,125	20,060,234	1,540,452	154,789	9,462
1908 ..	36	125	58,397,385	22,189,614	1,795,879	177,860	11,146
1909 ..	31	134	64,591,000	22,784,479	1,954,892	227,574	13,813
1910 ..	36	136	67,516,013	24,658,967	2,099,764	282,186	17,702
1911 ..	34	139	94,374,194	24,788,872	2,170,796	286,410	20,431
1912 ..	41	147	72,300,495	28,538,314	2,176,748	317,324	21,898
1913 ..	44	152	86,444,059	33,803,119	2,414,499	320,912	24,224
1914 ..	42	157	85,820,424	36,039,349	2,657,174	348,766	25,443
1915 ..	41	161	86,011,677	38,663,004	2,807,514	355,318	30,068
1916 ..	40	161	99,041,818	48,952,381	2,875,904	379,981	31,295
1917 ..	43	170	115,623,020	70,037,275	3,060,478	383,458	36,181
1918 ..	43	177	138,494,595	92,426,047	3,227,678	384,872	40,391
1919 ..	54	190	165,758,695	139,073,869	3,488,262	410,690	44,401
1920 ..	56	198	276,535,896	165,697,053	3,813,580	466,460	50,588
1921 ..	61	217	295,046,358	182,040,774	4,161,126	538,384	54,994
1922 ..	64	235	317,148,076	202,774,376	4,517,612	602,032	60,765
1923 ..	60	228	323,787,485	211,298,943	4,197,966	501,031	61,421
1924 ..	56	232	349,820,598	212,871,930	4,870,232	676,995	64,225

Imports and Exports.

Exports.				Excess of Imports.	Percentage of Cotton and Cotton Goods for the whole foreign trade of Japan.	
					Imports.	Exports.
Cotton Wadding.	Cotton Yarn.	Cotton Goods.	Total.			
Yen.	Yen.	Yen.	Yen.	Yen.	Per cent.	Per cent.
235,597	31,418,914	9,160,203	40,814,414	40,710,988	38	13
341,663	29,268,456	11,114,836	40,724,955	42,881,915	26	11
639,234	33,246,462	15,702,214	49,578,910	82,039,391	25	10
479,245	35,393,526	21,687,257	57,470,028	49,693,270	34	14
632,845	30,342,914	22,924,083	53,899,842	82,221,712	31	11
753,560	20,723,904	19,579,705	41,057,169	69,303,971	29	9
595,466	31,056,770	23,161,167	55,413,103	68,763,375	30	14
310,470	46,696,510	32,809,729	79,822,709	94,338,829	37	17
264,136	43,237,825	36,701,903	80,203,846	82,660,118	31	16
252,744	50,634,702	39,864,586	96,752,032	115,522,267	33	17
236,663	73,089,677	46,349,980	119,976,320	126,052,961	36	18
353,680	80,851,146	55,744,910	136,949,736	89,637,543	36	19
284,866	69,004,449	63,671,394	132,960,709	90,880,517	39	17
508,566	80,906,495	110,743,884	192,158,045	99,376,972	35	16
515,627	113,781,972	175,490,799	289,788,398	49,532,156	31	17
635,936	162,789,759	305,073,592	469,099,287	61,547,264	30	22
1,074,341	121,636,927	395,597,639	518,308,907	170,162,049	29	23
700,017	154,981,805	396,238,040	551,970,862	196,913,059	31	27
435,163	80,568,002	221,045,606	302,048,771	147,931,179	28	12
301,333	114,723,255	222,052,119	337,076,797	108,313,805	24	21
247,584	78,511,961	259,479,776	338,239,321	186,029,198	26	23
—	109,610,952	354,937,283	464,548,235	156,013,951	25	25

Japan's Production and Domestic use of Cotton Yarn.

Years.	Cotton Yarn Production.				Imports.	Exports.	Domestic Use and Others.
	16's. Bales.	20's. Bales.	Others. Bales.	Total. Bales.	Bales.	Bales.	Bales.
1903	330,667	175,843	295,227	801,738	3,539	307,201	498,076
1904	251,867	157,048	286,297	695,212	1,792	257,307	439,697
1905	309,173	209,816	386,547	905,536	7,459	267,383	645,603
1906	323,064	227,628	393,873	945,165	20,117	267,348	697,934
1907	341,433	218,665	423,384	983,482	5,951	226,472	762,961
1908	224,897	209,475	444,198	878,570	4,552	167,842	715,280
1909	295,802	229,763	499,678	1,025,244	3,204	258,878	769,570
1910	338,175	258,412	538,193	1,134,780	1,016	347,633	788,163
1911	295,065	262,298	571,903	1,129,267	1,843	285,009	846,101
1912	346,844	335,821	669,544	1,352,209	1,895	374,933	979,171
1913	396,045	371,522	749,814	1,517,982	1,266	468,736	1,050,512
1914	388,092	439,672	837,516	1,666,181	607	569,990	1,096,798
1915	393,027	443,040	884,197	1,720,264	588	575,891	1,144,961
1916	409,053	497,291	1,019,234	1,925,579	660	547,147	1,379,092
1917	359,623	528,603	1,035,615	1,923,841	904	470,852	1,453,893
1918	228,818	511,538	1,063,509	1,803,866	1,088	421,512	1,383,442
1919	204,486	539,748	1,176,548	1,920,782	8,907	230,333	1,699,356
1920	196,928	191,141	1,128,906	1,816,976	5,121	304,925	1,517,172
1921	215,682	436,029	1,159,038	1,811,350	2,579	292,260	1,521,669
1922	205,489	746,731	1,276,025	2,228,246	3,126	394,062	1,837,310
1923	179,357	680,798	1,320,088	2,171,153	6,332	248,324	1,929,161
1924	135,844	631,476	1,305,497	2,072,817	8,972	270,359	1,811,430

Japan's Exports of Cotton

Years.	China.		Hongkong.		British India.	
	Quantities.	Value.	Quantities.	Value.	Quantities.	Value.
	Piculs.	Yen.	Piculs.	Yen.	Piculs.	Yen.
1903 ..	837,822	28,338,366	53,225	1,891,426	16	731
1904 ..	645,479	24,145,213	68,249	2,698,520	....	....
1905 ..	697,998	28,693,913	22,154	938,579	270	11,268
1906 ..	729,657	32,047,107	18,760	883,767	45	2,155
1907 ..	572,605	25,423,430	23,488	1,084,251	1,189	55,073
1908 ..	402,801	16,360,708	19,533	955,190	123	4,511
1909 ..	708,300	28,898,310	10,166	509,304	45	2,603
1910 ..	904,605	40,224,249	53,858	2,648,059	2,102	207,819
1911 ..	702,973	35,422,504	38,754	2,148,590	5,426	585,083
1912 ..	912,598	45,757,048	87,272	4,547,930	2,966	327,561
1913 ..	1,167,892	60,095,834	102,093	5,746,697	9,774	987,364
1914 ..	1,365,371	64,558,930	198,373	9,167,521	9,431	971,202
1915 ..	1,391,762	55,503,214	195,723	7,964,419	4,694	405,237
1916 ..	1,320,474	63,842,489	151,144	7,642,095	35,233	3,239,314
1917 ..	1,069,727	85,801,331	175,216	13,413,890	27,938	4,132,636
1918 ..	695,066	86,365,593	187,794	23,473,101	238,280	34,908,715
1919 ..	468,783	84,119,074	106,915	18,527,003	14,259	2,980,475
1920 ..	500,132	81,060,949	175,046	28,937,190	142,846	30,252,515
1921 ..	523,751	47,114,017	168,634	15,410,379	111,492	11,991,334
1922 ..	638,585	62,185,072	250,181	23,478,306	204,959	20,666,783
1923 ..	364,703	38,503,601	120,325	11,534,733	170,812	20,511,884
1924 ..	289,609	49,883,714	184,479	22,250,027	242,521	35,954,637

Regarding exportation to Korea, accurate

Japan's Exports of Cotton

Excluding Cotton Towels, Cotton Handkerchiefs, Blankets and Blankelings of Cotton, Cotton bags,

Year.	China.	Kwantung Province.	Hongkong.	British India.	Straits Settlement.	Dutch India.	Asiatic Russia.
	Yen.	Yen.	Yen.	Yen.	Yen.	Yen.	Yen.
1903	2,983,591	....	1,113,391	56,528	48,551	....	7,111
1904	3,068,399	....	871,816	107,354	54,178	....	1,532
1905	4,606,791	....	1,087,143	45,857	102,357	....	86,752
1906	8,161,351	....	1,395,332	40,588	105,228	....	465,608
1907	4,718,474	2,730,557	1,083,494	45,397	159,002	....	333,033
1908	4,534,201	2,109,976	424,415	43,314	160,202	....	875,549
1909	6,727,832	3,583,566	522,476	54,452	215,378	....	433,268
1910	10,078,043	4,979,575	865,755	81,371	254,769	....	112,903
1911	10,128,091	6,756,739	561,549	111,832	243,699	204,539	183,685
1912	12,717,303	9,179,254	873,183	732,478	249,296	1 2,544	136,242
1913	18,964,913	9,109,327	1,142,558	1,031,906	274,580	232,543	880,716
1914	26,188,612	3,330,978	1,032,038	1 727,442	212,183	183,430	754,272
1915	27,331,680	3,177,680	913,303	3,703,475	338,309	428,975	905,341
1916	34,783,962	4,024,727	1,453,592	10,560,119	757,424	2,245 502	524,970
1917	84,804,372	8,988,294	2,647,565	15,121,454	1,359,324	5,701,034	1,959,338
1918	88,047,516	20,832,109	3,621,428	55,435,718	3,900,657	17,693 598	17,528,400
1919	143,283,813	44,207,583	3,208,145	29,507,929	2,742,145	24,415,754	18,878,498
1920	130,515,786	26,592,938	9,347,383	67,289,100	6,949,057	60,465,523	702,788
1921	100,987,683	15,536,666	12,306,505	30,465,794	3,841,641	25,571,947	415,341
1922	108,757,681	18,494,039	10,212,743	33,567,336	5,892,104	24,938,051	1,084,905
1923	100,292,315	14,617,573	11,625,461	36,546,103	6,048,085	22,534,624	685,830
1924	137,920,952	15,704,994	19,369,363	46 916,136	4,901,487	37,194,858	654,414

Regarding exportation to Korea accurate figures are not

Yarn to various Countries.

Philippine Islands.		Korea.		Other Countries.		Total.	
Quantities.	Value.	Quantities.	Value.	Quantities.	Value.	Quantities.	Value.
Piculs.	Yen.	Piculs.	Yen.	Piculs.	Yen.	Piculs	Yen.
3,760	150,953	26,834	1,030,664	11	473	921,608	31,418,613
4,535	220,658	53,521	2,196,897	141	7,168	771,925	29,268,465
6,934	349,369	74,603	3,252,992	193	9,350	802,151	33,246,462
6,831	349,262	46,387	2,052,520	364	18,715	802,044	35,303,526
6,645	356,445	75,219	3,413,464	280	14,956	679,426	30,346,710
7,935	379,319	65,421	2,696,323	7,718	327,853	503,531	20,733,904
4,571	212,082	44,176	1,674,937	9,370	359,474	776,634	31,656,770
10,509	560,928	59,476	2,520,098	12,355	534,758	1,042,905	46,696,511
9,228	614,727	68,483	3,024,536	30,163	1,442,325	855,027	43,237,825
10,876	700,660	63,103	2,953,956	47,983	2,346,641	1,124,798	56,634,702
9,887	670,793	45,710	2,092,139	70,860	3,496,850	1,406,216	73,089,677
14,372	920,719	57,061	2,296,646	65,362	2,936,128	1,709,970	80,851,146
10,889	650,945	80,064	2,793,442	44,545	1,687,192	1,727,677	69,004,449
5,666	452,884	78,410	3,314,641	50,517	2,415,072	1,641,444	80,906,495
9,780	989,778	82,792	5,642,720	47,106	3,801,617	1,412,559	113,781,972
17,054	2,336,321	39,159	4,489,740	87,185	11,126,379	1,264,538	162,789,759
2,078	374,536	48,142	7,404,845	50,834	8,230,934	691,011	121,636,927
7,645	1,586,127	16,604	2,587,874	72,502	10,557,150	914,775	154,981,805
4,253	449,300	....	....	68,053	5,602,912	876,783	80,568,602
8,687	910,275	....	....	79,774	7,482,819	1,182,186	114,723,255
6,802	771,632	....	....	76,332	7,190,711	744,974	78,511,961
5,398	669,935	....	....	89,075	9,852,639	811,082	109,610,952

figures are not available from September 1920.

Piece-goods to various Countries.

Turkish and Honeycomb or Huckaback, and Drawers of Cotton, Knit, of Cotton Caps, Cotton Threads.

Philippine Islands.	Siam.	Great Britain.	United States.	Australia.	Hawaii.	Korea.	Other Countries.	Total.
Yen.	Yen.	Yen.	Yen.	Yen.	Yen.	Yen.	Yen.	Yen.
11,044	....	21,847	63,549	13,715	98,023	2,409,064	48,533	6,874,947
42,087	....	16,681	98,282	20,662	80,566	3,331,549	50,325	7,743,431
31,692	....	15,633	122,684	18,495	75,403	5,235,020	64,257	11,492,084
110,038	....	30,670	79,217	34,404	99,873	5,010,476	85,157	15,617,942
416,075	....	30,969	93,467	32,195	101,847	6,385,942	213,645	16,344,097
665,353	....	29,719	52,795	66,559	92,656	5,523,017	233,318	14,611,374
905,641	....	36,739	93,068	139,486	129,468	4,509,092	322,720	17,672,986
769,997	....	100,258	100,748	117,220	164,037	2,528,166	309,693	20,462,535
775,910	8,307	75,184	144,781	171,461	175,317	9,005,184	138,463	28,684,721
558,370	102,633	58,931	216,253	380,108	193,028	11,192,098	161,767	36,953,493
545,800	112,671	105,142	316,680	531,358	152,055	9,409,939	205,435	43,015,623
308,133	60,587	74,904	233,719	495,213	101,314	8,562,649	137,956	43,403,410
247,968	67,977	193,301	311,865	531,808	180,826	9,982,959	178,937	48,494,382
277,316	179,581	781,992	1,428,262	1,872,833	221,622	13,122,816	958,742	73,173,460
1,066,497	382,341	61,133	1,655,078	1,746,809	264,692	20,650,101	1,700,320	148,198,352
1,547,777	1,544,786	463,461	942,332	10,294,441	182,018	30,727,345	15,878,879	268,640,465
505,729	334,467	204,933	1,954,911	3,745,466	390,341	70,884,271	6,931,343	351,195,333
6,551,838	1,362,112	86,182	2,207,401	10,837,039	545,159	17,207,269	11,513,720	352,178,295
3,779,039	609,640	57,004	3,615,493	2,857,550	418,405	....	3,210,671	203,873,379
3,452,640	1,362,544	48,870	4,125,972	6,290,925	321,637	....	3,492,672	222,052,119
5,398,857	1,432,448	5,791	2,503,531	6,064,102	419,285	....	26,053,480	234,227,485
6,895,489	1,564,053	9,799	4,118,243	7,745,995	237,330	....	43,354,371	326,587,484

available from September 1920.

Shipment of Cotton Piece-goods and Yarn from the United Kingdom to British India, China and Japan in the years 1890 to 1924 :—

Years. January to December.	Piece-goods of all kinds.			Yarn		
	British India.	To China (including Hongkong).	To Japan.	British India.	To China (including Hongkong).	To Japan.
	Yards.	Yards.	Yards.	Lbs.	Lbs.	Lbs.
1890	2,02,10,18,500	57,02,97,800	6,33,09,400	4,97,34,000	1,49,56,900	2,31,00,500
1895	1,71,82,24,000	52,81,87,300	9,00,35,600	4,10,70,600	1,12,26,100	2,12,66,000
1900	1,87,78,08,200	45,61,95,300	11,94,70,200	3,21,54,600	22,69,700	1,12,78,800
1905	2,39,19,89,000	79,97,32,300	12,87,24,800	3,93,21,300	84,40,900	40,70,700
1910	2,21,53,31,700	47,13,62,200	10,03,88,200	2,64,82,300	7,52,200	3,40,800
1911	2,42,16,61,200	64,75,03,100	9,23,08,300	3,64,08,000	30,90,000	....
1912	2,79,52,54,700	52,76,36,800	7,47,66,300	4,21,95,700	26,40,100	....
1913	3,05,73,92,000	71,65,71,400	5,01,09,000	3,74,21,400	21,46,400	....
1914	2,60,83,36,000	57,79,47,600	2,60,98,600	3,74,44,200	16,47,700	....
1915	1,90,80,94,500	37,50,82,300	1,96,62,800	3,79,78,300	6,78,600	....
1916	1,93,51,28,900	37,74,25,700	1,72,87,000	2,68,80,400	3,13,700	....
1917	1,90,67,24,500	30,95,85,900	1,25,97,500	1,79,00,100	1,88,500	....
1918	93,53,88,800	21,63,70,400	1,09,58,500	82,70,200	67,800	....
1919	76,77,76,300	30,44,35,600	1,07,66,200	93,63,700	3,50,800	....
1920	1,37,43,77,200	45,26,53,600	2,60,49,700	2,28,50,200	26,54,300	....
1921	1,09,20,67,700	21,10,63,100	1,34,06,800	3,46,18,400	34,67,400	....
1922	1,40,11,42,300	30,89,92,000	2,10,24,600	3,75,53,000	60,44,800	....
1923	1,41,09,10,800	23,53,29,400	1,63,07,500	2,08,98,000	4,86,900	....
1924	1,64,19,42,100	29,25,67,900	1,98,83,300	2,01,79,700	9,86,300	....
Average for 10 years (1915 to 1924) ..	**1,43,73,56,210**	**30,83,50,590**	**1,67,88,390**	**2,36,49,200**	**15,23,910**	....

The Trade of the Bombay Presidency : 1925-26.

Heavy fall in Imports.

Apart from the heavy fall in imports of treasure, there was a serious contraction of imported merchandise to the tune of nearly 8½ crores. Lower prices may account for this to some extent but there is no denying the fact that the import trade of Bombay has passed through a difficult year. With the exception of oils, all the first ten principal articles of import show decreases, cotton yarn, cotton manufactures and metals being the most prominent.

On the export side, the decrease in Indian produce amounts to Rs. 3,86 crores : here again the decrease is shared by all the articles standing above the 2 per cent. line with the exception of grain, pulse and flour. The total effect, however, is not nearly so discouraging as in the case of imports, in that the decrease in the value of raw cotton—which accounts for 66 per cent. of the total exports—is entirely due to the lower range of prices, as the actual tonnage exported showed an improvement over the previous year. The most marked decrease is that recorded under cotton manufactures, a natural reflection of the depressed state of the City's premier industry. The same reason accounts for the heavy fall in exports of cotton twist and yarn.

Changes in the direction of Bombay's trade contain one striking feature, *viz.*, that Japan now occupies first place to the detriment of the United Kingdom. Asia generally has improved her position by over 4 points. Europe has fallen back a point and the British Empire has lost 3¾.

The foreign trade of the Bombay Presidency proper is almost entirely confined to its chief port, Bombay. The foreign trade (private) of this port declined by Rs. 59.8 crores to Rs. 235 crores but stood at a higher figure than Calcutta's by Rs. 7 crores. Exclusive of treasure the port's foreign trade declined by Rs. 14.64 crores or 7 per cent. to Rs. 181 crores. The foreign trade of Calcutta fell by Rs. 3.41 crores or 1 per cent. to Rs. 225 crores and that of Karachi by Rs. 22.63 crores or 27 per cent. to Rs. 62.39 crores. Imports of merchandise into Bombay decreased in value by 10 per cent. and those into Calcutta and Karachi by 9 per cent. and 15 per cent. respectively. Cotton manufactures, sugar, metals and ores, dyeing and tanning substances, cotton yarn, raw cotton and machinery and millwork chiefly account for the decrease at Bombay, cotton piecegoods, sugar, railway plant and rolling stock, cotton yarn and salt at Calcutta and cotton manufactures and sugar at Karachi.

Exports of Indian produce also declined by Rs. 3.87 crores or 4 per cent. to Rs. 94.74 crores at Bombay and by Rs. 17.34 crores or 33 per cent. to Rs. 34.94 crores in Karachi, but advanced by Rs. 4.48 crores or 3 per cent. to Rs. 145 crores at Calcutta. Cotton manufactures and cotton yarn, raw wool, seeds and raw cotton largely account for the decrease at Bombay.

Imports.—All the classes except living animals record decreases. The most important class under imports is class III—articles wholly or mainly manufactured—and the drop of Rs. 6.73 crores in this class is largely accounted for by notable decreases in cotton yarn and manufactures, iron and steel, dyes and colours, silk yarn and manufactures and machinery and millwork. The falling off of Rs. 99.48 lakhs in raw materials and unmanufactured articles was due mainly to smaller arrivals of raw cotton, raw silk and coal and a considerable decrease in the value of sugar was responsible for the deficit in the class for food, drink and tobacco.

(From Official Reports.)

Imports pertaining to the Textile and Allied Industries.

	Average for five years ending 1913-14.	Average for five years ending 1923-24.	1924-25.	1925-26.	Percentage of trade of United Kingdom in each article. In the five years ending 1913-14.	In 1925-26.
	Rs.	Rs.	Rs.	Rs.		
Cotton manufactures	12,83,78,228	15,83,07,121	17,50,15,247	15,10,81,205	89.2	67.7
Machinery and Millwork	2,16,85,474	8,48,08,139	5,45,31,823	5,15,14,178	92.3	83.9
Cotton, Twist and Yarn	1,29,74,170	4,65,84,536	4,64,40,097	3,84,07,917	89.9	26.5
Cotton, Raw (including Waste) ..	96,72,549	1,57,89,737	4,23,90,317	3,63,98,200	57.0	9.7
Silk manufactures including silk yarn, noils and warps	1,98,05,733	3,44,96,961	3,00,49,306	2,21,14,607	5.6	2.1
Wool manufactures including yarn and knitting wool	1,87,21,037	1,26,46,971	1,58,88,085	1,59,14,908	71.0	58.1
Artificial Silk	....	47,34,989	1,35,04,945	1,44,36,753	..	31.7
Dyeing and Tanning substances ..	95,52,860	2,34,61,234	2,18,41,290	1,26,55,530	4.9	7.9
Paper and Pasteboard	50,12,924	1,34,76,515	1,03,31,564	1,02,03,763	50.1	32.4
Rubber	10,47,800	79,27,123	69,34,908	98,50,520	67.4	41.8
Apparel	60,31,575	90,46,275	73,06,447	71,21,679	44.2	45.2
Silk, Raw (including Waste) ..	92,81,373	1,16,97,342	84,64,610	61,31,431	0.1	0.2
Haberdashery and Millinery ..	62,33,941	71,72,152	55,42,247	43,35,822	41.6	29.1
Wool, Raw	11,78,850	7,78,017	36,13,706	37,07,652	13.9	46.0
Wood and Timber	41,62,664	66,38,519	29,20,272	35,05,452	2.6	6.4
Belting for Machinery	7,84,022	40,55,658	37,77,788	29,58,673	91.2	65.3
Leather and Manufactures of ..	22,47,182	40 84,748	28,24,296	26,36,067	90.3	78.9
Tallow and Stearine	10,80,785	22,19,511	23,54,168	25,75,903	86.8	30.0
Building and Engineering Materials	23,45,230	39,28,453	25,58,896	23,93,087	73.2	32.4
Bobbins	....	47,44,911	25,31,538	21,77,741	..	92.4
China Clay	....	15,61,825	16,01,124	13,64,429	..	75.1
Umbrellas and Fittings	9,87,119	9,98,985	12,12,257	10,23,161	34.1	34.4
Flax and Manufactures of ..	10,03,023	13,32,033	8,34,443	9,40,643	94.7	98.3
Jute, Manufactures of (including Twist and Yarn)	5,33,702	5,46,553	6,32,456	6,70,862	84.8	22.5
Cordage and Rope	3,12,049	5,68,703	4,51,144	4,41,017	51.0	33.7

Dyeing and Tanning Substances.—Due doubtless to the prevailing depression in the cotton mill industry imports under this head continued to decline and there was a further drop in the total value from Rs. 2.18 crores to Rs. 1.26 crore. This drop is almost entirely accounted for by a marked decrease in the importation of synthetic dyes from Germany, her share in the total imports declining from 74 to 50 per cent. Alizarine and aniline dyes are the two principal articles under this head. Imports of alizarine dyes fell by 4¼ million lbs. to 959,000 lbs. in quantity and by Rs. 28.17 lakhs to Rs. 6.31 lakhs in value, due chiefly to smaller arrivals from Germany. There was a slight improvement in shipments from the United Kingdom, those from Belgium recording a decline. Imports of aniline dyes dropped by 2¼ million lbs. to 6¾ million lbs. in quantity and by Rs. 65.72 lakhs to Rs. 1 crore in value ; Germany was the chief loser together with Belgium and the Netherlands, while supplies from the United States of America, Switzerland and the United Kingdom show appreciable improvements.

Machinery and Millwork.—With the continued depression of the cotton mill industry, it was not likely that there should be any halt in the downward movement of this section of the import trade, which has been in progress for the last four years. Total imports fell from Rs. 5.45 crores to Rs. 3.15 crores : textile machinery fell by Rs. 26 lakhs and decreases were also recorded under metal working machinery, saw mill and wood working machinery, and other sorts of machinery. Prime-movers (other than electrical) and agricultural machinery improved materially and helped to lessen the gap between this year and the last. In total imports, the share of the United Kingdom, the largest supplier, again fell from 86.6 per cent. to 83.9 per cent. The share of Germany, on the other hand, increased from 4.1 per cent. to 5.5 per cent. while that of the United States of America receded from 6.1 to 5.7 per cent.

Cotton, Raw.—The increase recorded successively during the last two years has not been maintained and imports fell by 2,589 tons to 17,504 tons in quantity and by Rs. 59.92 lakhs to Rs. 3.64 crores in value, due mainly to smaller arrivals from the United Kingdom and Kenya Colony. Shipments from the former decreased from 1,326 tons to 207 tons and from the latter from 16,241 tons to 15,662 tons in quantity, values dropping from Rs. 23.32 lakhs to Rs. 2.74 lakhs and from Rs. 3.6 crores to Rs. 3.37 crores respectively. Persia and the United States of America sent 1,129 tons and 103 tons against 1,421 and 427 tons respectively in the last year. Of the 16,000 tons of the African cotton imported, 6,000 tons went to Japan, 1,000 tons to the United Kingdom and 900 tons to the Continent of Europe, the balance being apparently consumed by the Indian mills which now use fine foreign cotton to a small extent.

Cotton Manufactures.—The following table shows the Imports into Bombay of grey, white and coloured piecegoods from foreign countries :—

	Grey.		White.		Coloured.	
	Yds.	Rs.	Yds.	Rs.	Yds.	Rs.
1913-14	205,504,424	3,25,03,889	239,739,768	4,31,90,864	345,803,566	7,41,71,898
1916-17	121,964,772	2,39,23,281	147,158,179	3,58,01,753	189,894,349	6,58,92,512
1917-18	100,541,447	2,36,05,603	120,502,608	3,32,20,581	152,672,767	6,59,56,034
1918-19	163,260,376	5,76,15,701	96,267,092	4,45,69,211	108,997,702	5,77,82,586
1919-20	68,904,029	3,05,02,423	85,681,147	4,35,55,657	83,779,689	5,21,73,300
1920-21	143,249,972	6,67,07,333	102,049,443	5,46,20,646	177,842,274	12,73,65,940
1921-22	116,661,599	4,13,06,348	49,902,453	2,21,61,782	34,070,597	1,95,83,161
1922-23	139,695,789	4,81,50,079	61,869,714	2,45,51,239	79,791,552	4,07,63,617
1923-24	126,540,153	4,51,36,174	87,408,458	3,48,83,238	136,320,483	7,04,99,938
1924-25	131,303,058	4,60,05,339	115,467,755	4,28,78,160	143,849,755	7,01,32,259
1925-26	120,791,490	3,91,96,240	101,591,260	3,79,90,670	131,295,896	5,82,45,017
Increase or decrease in 1925-26 ..	—10,511,568	—68,09,099	—12,876,495	—48,87,490	—12,553,859	—1,18,87,242

Cotton Piecegoods.—The year was a disappointing one for the trade and opened with a considerable accumulation of stocks and the steady demand necessary to work these off was absent. Instead, there was at one time uncertainty as to the monsoon and above all uncertainty as to future prices owing to the fluctuating estimates of the American crop during the period of falling prices following on the bumper crop finally recorded, larger orders could not be expected. In consequence contracts during the actual busy season tended to be of a retail character only.

The total value of imports of cotton piecegoods (including fents) fell by Rs. 2.34 crores to Rs. 14.19 crores. The largest drop is recorded in coloured piecegoods which was responsible for a decrease of Rs. 1.19 crore, grey and white piecegoods sharing Rs. 68.09 lakhs and Rs. 48.87 lakhs respectively. Imports of fents valued at Rs. 65.07 lakhs showed a small improvement due to larger despatches from the United States of America, amounting to Rs. 26.09 lakhs against Rs. 14.05 lakhs in the last year, while the arrivals from the United Kingdom receded from Rs. 48.53 lakhs to Rs. 38.43 lakhs. The share of the United Kingdom in the total imports under this head was 69 per cent. against 74 per cent. in the preceding year while that of Japan rose from 17 per cent. to 22 per cent. in the year under report. Imports of grey piecegoods fell by Rs. 68.09 lakhs to Rs. 3.92 crores chiefly as a result of smaller arrivals from the United

Kingdom. The share of Japan is larger than that of the United Kingdom and has risen from 54 to 69.7 per cent. Longcloth and shirtings and sheetings are the chief items under this head, bulk of which is supplied by Japan. Imports of the former from Japan increased by Rs. 42.38 lakhs to Rs. 1.68 crore but supplies of the latter further receded by Rs. 19.2 lakhs to Rs. 66.79 lakhs. As usual, the United Kingdom was the principal source of supply of white and coloured piecegoods, both of which show considerable decreases. Imports of whites declined by Rs. 48.87 lakhs to Rs. 3.8 crores of which British supplies constituted about 89 per cent. against 90 per cent. in the preceding year. The principal varieties are (1) mulls (2) longcloth and shirtings, (3) nainsooks, and (4) dhutis, saris and scarves, the bulk of which came from the United Kingdom. Imports of coloured piecegoods dropped by Rs. 1.19 crore to Rs. 5.82 crores to which the United Kingdom contributed 84 per cent. against 85 per cent. in the preceding year, the principal items being (1) prints and chintz, (2) saris and scarves, (3) shirtings, (4) cambrics, and (5) unspecified descriptions.

Imports of Cotton Yarn.

From	Quantity in thousands of lbs.		Value in lakhs of Rs.	
	1924-25.	1925-26.	1924-25.	1925-26.
United Kingdom	8,481	5,270	188	102
Japan	18,105	21,105	264	279
Other Countries	729	219	12	3

The improvement noticed last year was not maintained and the total imports of cotton yarn decreased by 601,000 lbs. to over 26½ million lbs. in quantity and by Rs. 80.32 lakhs to Rs. 3.84 crores in value, owing mainly to a marked fall in the arrivals from the United Kingdom. Imports from the United Kingdom, which were mainly of higher counts, fell by nearly 3¼ million lbs. to 5¼ million lbs. in quantity and by Rs. 50.43 lakhs to Rs. 1.02 crore in value. On the other hand, arrivals from Japan advanced by 3 million lbs. to 21 million lbs. in quantity and by Rs. 14.66 lakhs to Rs. 2.79 crores in value. A noteworthy feature of the arrivals from Japan in the year under review was that supplies of lower counts have again fallen while those of higher counts show a notable improvement. Her despatches of 10s to 20s decreased by 272,000 lbs. to over 1¼ million lbs. and 21s to 30s from 330,000 lbs. to 150,000 lbs. Her sendings of 31s to 40s, on the other hand, improved from 10½ million lbs. to 12 million lbs. Even the arrivals of higher counts 51s to 60s rose further from 343,000 lbs. to 651,000 lbs. and those of 61s to 100s and above 100s amounted to 24,000 lbs. and 79,000 lbs. respectively against none in the preceding year. These figures suggest very forcibly that the Japanese competition in yarn militates more against Lancashire than Bombay. Despatches from China were 36,000 lbs. only against 326,000 lbs. in the last year. During the year under report imports of mercerised cotton yarn amounted to 2¾ million lbs. valued at Rs. 63.77 lakhs as against over 2½ million lbs. valued at Rs. 71.07 lakhs. The chief source of supply was Japan, the share of the United Kingdom being 10 per cent. In the following table the production of yarn in the Bombay Presidency is compared with the import from abroad. The production of yarn was naturally affected adversely by the mill strike.

(The figures are shown in millions)

	Yarn Imported.			Yarn Locally Produced.		
	20s. to 30s.	31s. and upwards.	Total yarn.	20s. to 30s.	31s. and upwards.	Total yarn.
	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.	Lbs.
1921-22 ..	3.42	15.48	31.18	39.75	14.87	400
1922-23 ..	4.52	14.30	33.87	39.72	14.13	497
1923-24 ..	.84	11.77	23.55	41.95	15.93	398
1924-25 ..	.63	15.55	27.31	50.48	19.85	474
1925-26 ..	.44	15.51	20.65	51.12	10.00	423

Artificial Silk.—The steady progress noticed in artificial silk yarn in the two preceding years continued during the year under review and supplies rose by over 1 million lbs. to 2 million lbs. and by Rs. 24.20 lakhs to Rs. 56.19 lakhs in value; the chief sources of supply were Italy, the United Kingdom and Germany. Imports of piecegoods of cotton and artificial silk also improved by 165,000 yards to over 9½ million yards in quantity but fell by Rs. 15.38 lakhs to Rs. 85.94 lakhs in value. The principal suppliers were the United Kingdom, Italy and Switzerland.

Re-exports.—There was a very marked falling off in the entrepot trade of Bombay during the year under review, the value contracting by Rs. 2.33 crores and falling to Rs. 7.58 crores. Raw cotton accounted for Rs. 75 lakhs of this fall due partly to the fact that East African cotton was shipped direct to the United Kingdom instead of *via* Bombay, and partly to Japan finding it less profitable to import East African cotton than in the previous year. The fall of Rs. 87 lakhs in re-export of cotton manufactures reflects the smaller imports during the year and the general trade depression which prevailed, East Africa, Aden, Arabia and Mesopotamia all took smaller quantities.

Indian Produce and Manufactures.

In the following table the relative values of the more important articles of export from Bombay are shown:—

	Average for 5 years ending 1913-14.	Average for 5 years ending 1923-24.	1924-25.	1925-26.
	Rs.	Rs.	Rs.	Rs.
Cotton, Raw (including waste) ..	23,31,13,330	52,33,06,940	63,28,05,578	62,78,94,273
Cotton Manufactures	1,17,69,053	5,55,27,361	4,80,52,601	3,73,50,628
Cotton Twist and Yarn ..	8,50,57,468	8,41,20,532	3,64,99,928	2,90,48,845
Wool, Raw	1,19,80,780	2,06,86,219	2,37,10,180	1,70,46,964
Leather	71,41,218	1,01,58,153	99,80,701	78,35,092
Wool Manufactures	8,54,749	32,54,860	53,26,786	35,21,527
Dyeing and Tanning substances except Myrabolams	7,58,821	23,53,721	15,16,007	23,85,694
Wood and Timber	4,59,065	8,75,194	14,08,245	15,88,083
Jute Manufactures	9,20,493	14,88,819	14,96,309	8,90,927
Silk and articles made of Silk ..	3,06,314	7,21,219	8,00,669	7,04,412

The Export Trade of Bombay.

The principal feature of the export trade was that the total value of Indian produce exported has again fallen from Rs. 98.6 crores to Rs. 94.74 crores. This fall is attributable mainly to a large shrinkage in shipments of cotton manufactures, raw wool, cotton yarn and seeds.

Cotton, Raw.—A heavy fall in prices was the most marked feature of the year. The American cotton crop for 1925-26 season has been definitely reported to be the largest on record, namely, in the neighbourhood of 17 million bales and this followed on another large crop of over 13 million bales in 1924. The 1924-25 crop in India constituted a record amounting to over 6 million bales and the yield of 1925-26 has been nearly as large. The growth of cotton in other parts of the world was also satisfactory. The natural effect was a gradual decline in prices: it is suprising indeed that the fall was not heavier. Due to the uncertain position of the American crop in the beginning of the 1925 season fluctuations were irregular. At the end of March 1925 the spot price for Middling American was 14.07*d.* In April it fell to 13.43*d.* and May saw a further fall to 12.71*d.* From this point it rose to 13.48*d.* in June and again to 13.71*d.* in July. From August it took a downward turn in sympathy with the prospects of a bumper crop, and it closed at 9.50*d.* at the end of March 1926. Prices in Bombay were above American parity. The Indian crop was large but much of it was inferior in quality being damaged by the late unseasonable rains. The rate for Broach, which stood at Rs. 407 at the end of March 1925, fluctuated between Rs. 450 and Rs. 470 till the middle of May when it dropped to Rs. 427. The

quotation then took an upward turn and closed at Rs. 444 old contracts. The new contract opened on 2nd June at Rs. 414 and fell to Rs. 400 in the same month. Thereafter prices continued to rise reaching Rs. 445 in the third week of September. From then the price steadily declined till the end of December when it reached Rs. 365. During January and February 1926 it fluctuated between Rs. 355 and Rs. 360 and thereafter it steadily declined, closing at Rs. 352 by the end of March 1926.

In view of abundant supplies of American cotton and the comparatively high prices of Indian cotton, continental spinners were induced to purchase a large quantity of American cotton. In consequence shipments to Europe were on a somewhat smaller scale than in the previous year. On the other hand, owing to the uncertainty of conditions in China, both that country and Japan took considerably large supplies and total shipments exceeded the previous year by 73,000 tons. The actual figures of exports to different countries from Bombay are given in the sub-joined table :—

Cotton, raw, including waste.	1924-25.		1925-26.		Increase or decrease in 1925-26.	
	Tons.	Rs.	Tons.	Rs.	Tons.	Rs.
United Kingdom	13,470	1,82,58,877	14,063	1,67,09,392	+593	—15,49,485
Germany	14,044	1,76,74,869	14,611	1,63,47,569	+567	—13,27,300
Netherlands	1,902	21,44,823	2,434	24,37,947	+532	+2,93,124
Belgium	22,331	3,16,05,294	25,546	3,07,50,706	+3,215	—8,54,588
France	18,805	2,75,80,833	25,165	3,00,27,044	+6,360	+24,46,211
Spain	12,594	1,99,19,922	7,370	90,35,197	—5,224	—1,08,84,725
Ceylon	753	10,69,808	1,349	21,38,530	+596	+10,68,722
Italy	49,030	7,67,00,528	40,822	5,08,56,291	—8,208	—2,58,44,237
Austria	1,376	22,17,471	289	3,37,700	—1,087	—18,79,771
China	35,943	5,46,00,430	70,920	9,15,00,984	+34,977	+3,69,00,554
Japan	242,351	36,84,27,320	281,746	36,57,90,068	+39,395	—26,37,252
Indo-China (including Cochin China, Cambodia, Anam, Tonkin and French leased territories in China).	4,822	74,10,670	7,441	94,73,345	+2,619	+20,62,675
United States of America *via* Atlantic Coast.	3,202	38,16,242	2,416	19,21,570	—786	—18,94,672
Other countries	1,128	13,78,491	643	5,87,930	—485	—8,10,561
Total ..	421,751	63,28,05,578	494,815	62,78,94,273	+73,064	—49,11,305

Cotton Manufactures.

The following table exhibits the export trade in Indian piecegoods during 1924 and 1925-26.

	1924-25.		1925-26.	
Grey—	Yds.	Rs.	Yds.	Rs.
Anglo-Egyptian Sudan ..	1,477,151	4,52,664	748,689	1,90,159
Aden and Dependencies ..	1,994,603	5,82,858	1,656,631	4,43,587
Bahrein Islands	600,600	2,00,842	646,943	2,04,181
Mauritius and Dependencies ..	473,412	1,39,757	421,108	1,01,827
Zanzibar and Pemba ..	2,046,863	7,27,502	1,476,559	4,00,557
Mesopotamia	13,090,690	36,88,383	10,663,458	25,57,001
Other Native States in Arabia.	220,131	63,551	373,088	1,12,438
Kenya Colony (formerly known as East African Protectorate)	4,185,526	1,587,907	3,922,302	13,44,705
Egypt	105,513	32,424	372,650	95,798
Portuguese East Africa ..	6,626,367	17,29,059	5,536,810	14,36,462
Italian East Africa	731,891	1,67,074	867,675	1,93,819
Tanganyika Territory ..	4,976,092	18,29,136	3,496,722	11,37,162
Siam	435,924	1,50,125	734,380	1,86,615
Persia	5,549,073	13,29,045	4,129,828	9,19,576
Other countries	1,114,462	3,89,825	1,829,062	6,74,903
Total Grey ..	43,718,388	1,30,70,212	36,875,905	1,00,64,790
White	861,793	3,19,189	569,946	1,76,208

Cotton Manufactures.—(*contd.*)

	1924-25.		1925-26.	
Coloured, Printed or Dyed—	Yds.	Rs.	Yds.	Rs.
Aden and Dependencies ..	3,697,546	14,52,085	2,807,697	10,78,696
Bahrein Islands	5,616,550	19,34,365	3,221,035	12,95,808
Ceylon	1,811,409	9,35,124	2,327,063	11,71,743
Natal	1,041,227	4,37,401	1,413,375	4,18,796
Egypt	1,762,510	5,45,159	2,336,406	6,01,719
Kenya Colony (formerly known as East African Protectorate)	2,851,214	12,19,603	3,625,273	13,23,912
Zanzibar and Pemba ..	1,405,790	5,91,493	1,213,451	4,60,653
Anglo/Egyptian Sudan ..	1,990,147	8,08,167	1,319,390	5,11,014
Mesopotamia	35,506,783	88,03,523	22,882,326	54,12,900
Muskat Territory and Trucial Oman	2,483,594	8,68,343	2,106,883	6,99,892
Other Native States in Arabia ..	3,207,517	12,44,100	1,841,778	6,61,529
Persia	27,205,362	94,31,527	24,396,700	70,15,376
Siam	1,621,190	12,89,197	1,474,548	9,21,524
Portuguese East Africa ..	2,681,505	9,66,762	3,294,590	10,43,683
Tanganyika Territory ..	1,807,418	7,67,211	3,457,310	11,89,467
Other countries	3,749,747	15,04,569	5,096,124	18,87,824
Total Coloured ..	98,445,509	3,27,98,629	82,814,149	2,53,94,626
Total Piece-goods .	143,025,690	4,61,88,030	120,260,000	3,56,35,714

Fall in Prices of Cloth and Yarn.

The depression which characterised the mill industry during the two preceding years settled down more heavily than ever during the year under review. Prices of cloth and yarn were continually falling. The price of standard longcloth continued at the low level of Re. 1-4-6 till the end of April. From this point a further decline set in and by the middle of September reached Re. 1-2-0. Thereafter, owing to the closing of the mills the rate improved, but only to a small extent, and that too temporarily. The off-take during the period of the strike was poor and prices again sagged, closing at Re. 1-1-6 at the end of December. Lack of confidence rendered business on a wholesale basis impossible and whatever sales were effected were made at unremunerative rates. Production, particularly of coloured cloth, fell off to a very marked extent, as compared with the preceding year. In consequence total shipments during the year fell by 22½ million yards to 120 million yards in quantity and by Rs. 1.05 crore to Rs. 3.56 crores in value. Mesopotamia, Persia, Arabia and most of the countries in East Africa, which are the principal markets, took smaller quantities, the decrease being more marked in the takings of Mesopotamia and Persia, where the competition of Japan in greys and of Italy in *susi* checks had a detrimental effect on Bombay's exports. The percentage shares of grey and coloured piecegoods remained unchanged. Mesopotamia continued the largest buyer of grey piecegoods and Persia of coloured piecegoods, closely followed by Mesopotamia.

Exports of Piecegoods (in lakhs of yards).

The following figures indicate more clearly the changes in the trade:—

	Grey.		Coloured.	
	Indian.	Foreign.	Indian.	Foreign.
	Rs.	Rs.	Rs.	Rs.
1918-19	512	400	636	392
1919-20	725	339	869	238
1920-21	473	320	660	131
1921-22	238	469	1,024	109
1922-23	305	512	898	126
1923-24	339	404	920	107
1924-25	437	317	984	119
1925-26	369	152	828	98

The export of both grey and coloured Indian piecegoods, particularly of the latter, show notable decreases. Re-exports of foreign greys and coloured goods also fell considerably.

Exports of Yarns.

	1924-25.		1925-26.	
	Lbs.	Rs.	Lbs.	Rs.
United Kingdom	305,637	4,77,234	325,028	2,44,624
Egypt	6,666,618	67,13,515	5,095,130	47,92,717
Aden and Dependencies ..	2,853,240	32,84,395	2,613,600	26,85,051
China	....	....	8	10
Hongkong	14,128,010	1,35,55,870	9,444,904	81,36,722
Italy	26,656	26,637	1,251,880	9,37,530
Turkey European	364,200	3,54,693	785,200	7,36,583
Siam	1,428,000	15,36,937	1,070,040	15,42,612
Persia	3,227,025	36,01,229	3,617,100	37,94,733
Straits Settlements	810,290	8,06,503	1,085,080	10,72,157
Mesopotamia	921,000	9,21,151	706,516	7,61,245
Syria	2,376,314	23,08,530	1,782,400	16,30,298
Other countries	2,753,259	28,23,135	3,059,762	25,64,627
Total ..	36,060,849	3,64,99,928	31,535,548	2,50,48,843

Fall in the price of Yarn.—For largely the same reasons the yarn trade was also disappointing. The price of yarn steadily declined in sympathy with that of cotton. The general demand was not attractive and hence there was no scope for operations on a big scale. The net result was that exports of yarn again declined by 4½ million lbs. to 31½ million lbs. in quantity and by Rs. 74.51 lakhs to Rs. 2.9 crores in value. Italy, European Turkey, Persia and Straits Settlements increased their demand, but there was a heavy falling off in shipments to Hongkong, Egypt, Mesopotamia and Syria. Though figures are not available, it is more than probable that Japanese competition has contributed mainly to this result.

Change in Prices.—The effect of the changes in prices has been indicated in the following table in which the value of the principal articles of imports and exports has been recalculated at the previous year's prices and the volume contrasted with that of the last year. As prices of imports for the most part have declined and the value of the total imports of merchandise shows a noticeable decrease, it is evident that the volume of imports has decreased considerably. Under exports raw cotton shows a considerable increase in volume.

Imports.

Articles.		1924-25.		1925-26.	
		Quantity.	Value. Rs.	Quantity.	Value. Rs.
Coal	Tons.	288,809	77,51,851	232,606	53,54,193
Dyes obtained from coal tar	Lbs.	14,220,712	1,09,88,980	7,694,940	1,06,01,137
Textiles—					
Cotton, Twist & Yarn.	Lbs.	27,315,042	4,64,40,607	26,053,955	3,84,07,917
Cotton Piecegoods—					
Grey	Yds.	137,363,458	4,60,05,339	120,791,490	3,91,96,240
White	,,	115,467,755	4,28,75,160	101,591,266	3,79,90,670
Coloured printed or dyed	,,	143,849,755	7,01,32,259	131,295,896	5,82,45,017

Exports.

Textiles—					
Cotton, raw	Tons.	415,401	62,30,81,057	484,964	62,15,03,874
Cotton, Twist & Yarn.	,,	36,000,849	3,64,99,928	31,535,548	2,99,48,845
Cotton Piecegoods	Yds.	143,025,690	40,188,030	120,260,000	3,56,35,714

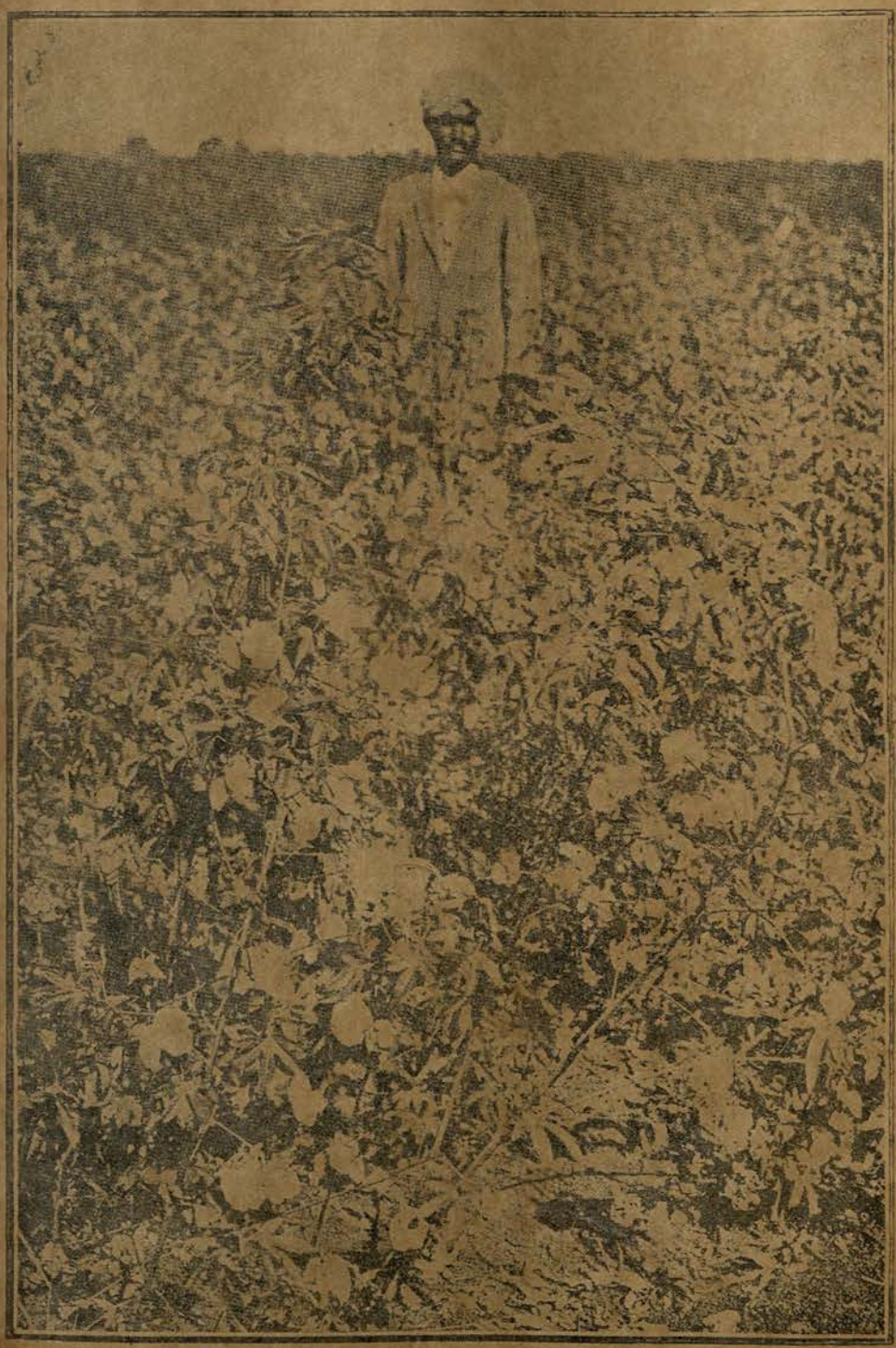
A similar contrast is made in the sub-joined table between the year under review and 1913-14, the year immediately preceding the war. It will be seen that excepting cotton twist and yarn the volume of the import trade is considerably below the pre-war level, though 1913-14 was an exceptionally good year. Similarly the volume of exports compares unfavourably with that of 1913-14 except in the case of raw cotton, and piecegoods which show notable increases in volume.

Imports.

Articles.		1913-14.		1925-26.	
		Quantity.	Value. Rs.	Quantity.	Value. Rs.
Coal	Tons.	443,085	82,41,479	232,606	53,54,193
Dyes obtained from coal tar	Lbs.	11,885,515	70,28,764	7,694,940	1,06,01,137
Textiles—					
Cotton, Twist & Yarn	,,	15,603,304	1,49,53,851	26,053,955	3,84,07,917
Cotton Piecegoods—					
Grey	Yds.	205,504,424	3,25,03,889	120,791,490	3,91,96,240
White	,,	234,739,768	4,31,90,864	101,591,266	3,79,90,670
Coloured, printed or dyed.	,,	345,803,560	7,41,71,808	131,295,896	5,82,45,017

Exports.

Textiles—					
Cotton, raw	Tons.	380,404	20,70,81,890	484,964	62,15,03,874
Cotton, Twist & Yarn.	Lbs.	185,920,805	9,21,00,203	31,535,548	2,99,48,845
Cotton, Piecegoods	Yds.	61,215,200	1,11,06,052	120,260,000	3,56,35,714



IN AN INDIAN COTTON FIELD.

Characteristics of Indian Cottons.

BENGALS.—The so-called 'Bengal' cottons are grown over almost the whole of northern India, from Bengal to the Punjab, including Rajputana. They almost entirely consist of a mixture of various varieties of *Gossypium neglectum*, with a very variable percentage of *Gossypium indicum*, and they form, on the whole, the shortest staple cotton in India. The staple of 'True Bengals,' is usually from 4/8 to $\frac{5}{8}$ inch, and that of 'Ordinary Bengals' is from $\frac{3}{8}$ to 4/8 inch. They are coarse, but usually of good colour. The ginning percentage varies between 32 and 38, the lower percentage being for the finer varieties.

SIND AND PUNJAB DESHI.—This cotton is really of the 'Bengal' type, containing the same varieties, and possessing almost the same or slightly lower staple.

OOMRAS.—Oomra cottons are produced over very large areas of the Central Provinces, Central India, Berar, Khandesh and Nasik, and the Nizam's Dominions. They vary from the very high class *bani* or *gaorani* cotton of the Nizam's Dominions to the lower class of Khandesh cottons which are little, if any, better than many of the Bengals. The following types may be distinguished :—

1. *Bani* or *gaorani cotton* in greater or less mixture over a million acres in the north of the Nizam's Dominions and the Hinganghat District of the Central Provinces. It consists essentially of *Gossypium indicum*, gives a small ginning percentage of 25 and does not yield a large crop per acre. The staple is over 1 inch and it is the finest indigenous Indian cotton. Though included under Oomras for statistical purposes this cotton is not included in Oomras for purposes of Hedge and delivery contract, being a long staple cotton as distinct from a fair staple cotton.

2. *Berar cotton* is composed of a mixture of varieties of *Gossypium neglectum*, with a staple of 5/8 to 6/8 inch with a certain though dwindling amount of *G. indicum*. The ginning percentage is about 35 (the coarser varieties being as high as 38—40). Berar cotton fetches a premium over Khandesh in the market.

3. *Central Provinces cotton* proper, like Berar cotton, is a mixture of different varieties of *G. neglectum* with a certain amount of *G. indicum* (*Bani*). The finer cottons predominate and C. P. cotton maintains a marked and apparently increasing premium over Berar.

4. *Khandesh cottons.*—These represent the lowest grade of Oomras, and are grown over the whole of Khandesh, Ahmednagar, Sholapur and adjoining tracts. The ginning percentage varies from 33 to 38 and the staple is one-eighth of an inch less than Berar cotton, being from 4/8 to 5/8 inch. The cottons from the northern Central Provinces districts such as Khandwa are classed as Khandesh.

5. *Central India cottons* vary from Khandesh to a type approaching the best Central Provinces cotton. Malwa cotton, grown on the Malwa plateau on a limited area (some 100,000 acres), consists almost entirely of the best type of *G. neglectum* with a staple of 6/8 to 7/8 inch, the ginning percentage, however, being low.

BROACH.—Broach cotton is produced over lower Gujarat, as far north as Baroda. It consists of a mixture of varieties of *Gossypium herbaceum*, and there has been a tendency in recent years for the admixture with poorer, coarser, and shorter staple varieties (notably the so-called) *Goghari* to increase, as these give a higher ginning percentage than the better types. The best quality cotton is grown at Navsari, with a staple of $\frac{7}{8}$ to 1 inch, and as one proceeds north from this point the quality tends to get lower. The ginning percentage of a good Broach cotton is between 30 and 32, but some types of *Goghari* go as high as 37. Recent work by the Agricultural Department has done much to restore the quality of Surat cotton, and in that district Goghari cotton has largely been replaced by selected Surat. The notification of these areas south of the Nerbudda under the Cotton Transport Act has done much to assist in the maintenance of the better types of Surat cotton, particularly of the valuable 1027 variety.

DHOLLERAS.—The Dholleras cottons are those grown in northern *Gujarat* and Kathiawar, and take their name from a small town in Kathiawar a little to the north of Bhavnagar. They are a very mixed class of cotton at present, and owing to the spread of the growth of cottons similar to those of Khandesh (*Mathio*) in Kathiawar and of the inferior types of *Gossypium herbaceum* (*Goghari*) in northern Gujarat, there has been a tendency for the quality of Dholleras to decline in the last twenty years. The standard types of Dhollera, consisting of *Gossypium herbaceum* and known locally as *Wagad* and *Lalio*, have a staple of $\frac{7}{8}$ to $\frac{7}{8}$ inch, and a ginning

percentage of 33. The admixture above mentioned will reduce the staple to anything between the above and that of Khandesh cotton—though the ginning percentage be raised by these admixtures to 35 or more.

KUMPTAS.—Kumpta cotton is another variety of *Gossypium herbaceum* grown in large areas in the southern part of the Bombay Presidency and the northern districts of Mysore. The staple is equal to Surat Broach (⅞ inch), but the cotton has always a yellow tint. The ginning percentage is low, not greater on the average than 26 to 27. It comes on the market in a very clean condition. A selected type of Kumpta cotton called Dharwar No. 1 with a ginning percentage of 28.5 and a better staple is fast gaining ground and displacing the ordinary Kumpta which is at present a mixture of various strains.

The auction sales of graded kapas and the clean picking propaganda by the Public Co-operative Cotton Sales Society are greatly responsible for the improved state noticeable in the marketing of this cotton. More important still, is the notification of the Kumpta-Dharwar tract under the Cotton Transport Act, which prevents the importation of inferior cotton for mixing purposes which has done so much in recent years to destroy the reputation of an intrinsically valuable cotton.

WESTERNS AND NORTHERNS.—These cottons, which have most of the characteristics of Kumpta, and which are likewise composed of varieties of *Gossypium herbaceum*, with a variable proportion of *Gossypium indicum*, are grown to the east of the Kumpta area in the northern part of the Madras Presidency and the southern part of the Nizam's Dominions. They have a staple of 6/8 to ⅞ inch. The ginning percentage is low, generally from 25 to 27. Important progress has been made in the introduction of a pure *Indicum* type of Northerns (Nandyal 14) and selected Westerns (Hagari 25) both of which command a considerable premium over the present mixture. These are sometimes styled as Sircar No. 13 and Sircar No. 25 respectively.

DHARWAR-AMERICAN OR SAW-GINNED DHARWAR.—This cotton, a mixture of Upland American (*Gossypium hirsutum*) and New Orleans (*Gossypium Mexicanum*), is a type which has been acclimatised as a result of efforts to introduce American cotton as long ago as between 1840 and 1850. It is now grown on about 250,000 acres almost entirely on the lighter cotton soils in the Dharwar District. It gives a cotton slightly inferior in staple to the *Kumpta* from the same district, but with a ginning percentage of 30, and is distinctly less leafy. Here again a pure upland type known as Gadag No. 1 has been established on a considerable scale, the ginning percentage being 33 and the staple well above the average.

PUNJAB-AMERICAN COTTON.—This is an acclimatised Upland American cotton introduced originally into India about 1850, and is grown in the Canal Colonies of the Punjab to the extent of nearly a million acres. In colour and style it resembles ordinary Upland American. The ginning percentage is about 32 per cent. In good seasons this cotton is suitable for spinning up to 25's warps, but when grown on unsuitable land without adequate irrigation it is apt to be short and weak. The staple is approximately 0.9 inch in length. Remarkable success has been achieved within a few years in replacing short-stapled *desi* cotton by Punjab-American to the extent of nearly one-half of the Punjab cotton area. An adequate premium to the grower has been secured by a system of kapas auctions which has materially assisted the extension of this cotton; these auctions have also had a marked effect in improving the purity of the cotton. The auctions having largely served their original purpose have now been largely discontinued as the market for cotton is established. Mixing in ginning factories is still a great difficulty and causes considerable loss to the grower besides threatening the reputation of this important cotton. In 1922-23 the yields and quality were superior to the preceding year. A recent selection (285 F) has given excellent results in the Montgomery District, and possessing a staple of 11/16" to 1¼" commands a considerable premium.

TINNEVELLYS.—This cotton is a mixture in varying proportions of two distinct varieties known locally as (1) Karunganni, a variety of *Gossypium indicum*, and (2) Uppam (*Gossypium herbaceum*). It is essentially a dry land crop cultivated without irrigation on black soil of varying depth and natural fertility. It is now grown on some 600,000 acres in the districts of Madura, Ramnad and Tinnevelly. It is, however, being replaced by pure Karunganni. The length of the staple of Tinnevelly cotton varies from 6/8 inch to ⅞ inch. It has a ginning percentage of 27. It has a slight creamy colour and is strong. It is sown in October-November with the aid of the north-east monsoon rains and harvested between March and August. Favourable summer rains gives a good second flush.

KARUNGANNI.—This cotton is a variety of *Gossypium indicum*. It is white in colour and has a ginning percentage of 25 to 26. The length of the staple varies from 9/10 to 1 inch. Up to about 1907 its cultivation as a pure crop was confined to a few villages near Tuticorin. Trials carried out on the Koilpatti Agricultural station established the superiority of Karunganni

both in staple and outturn over Uppam. Selection of improved strains of Karunganni were carried out here, resulting in the evolution of two superior strains of this variety known as Company No. 2, an unevenly ripening cotton with a ginning percentage of 29 to 31; and Company No. 3, a variety which ripens early and evenly and has a ginning percentage of 30 to 33. The length of the staple of both the strains varies from 1 inch to 1 1/16 inches. As a result of the propaganda work of the Agricultural Department, the average area under Karunganni, including Company No. 2 and Company No. 3, is about 200,000 acres. Karunganni is sown from the 15th October to the 15th December, Company No. 2 from the end of October, to the beginning of December, and Company No. 3 from the middle of October to the middle of November. There is also a small area under Karunganni in the districts of Salem, Coimbatore and Trichinopoly where the yield last year was estimated at 8,500 bales of 400 lbs. each. Of course, Karunganni cotton passes under the trade name of "Tinnevelly." It is the best of the indigenous cottons of Madras and is the only indigenous Madras cotton regularly quoted and dealt in on the Liverpool market.

CAMBODIA.—This cotton is a type of American Upland (*Gossypium hirsutum*). It was obtained direct from Cambodia about 1905 and was introduced mainly into tracts in which cotton was not already grown. It flourishes in light red soils under wells throughout the southern cotton-growing districts of the Madras Presidency. The best Cambodia is available in the district of Coimbatore (Tiruppur) and in the western part of the district of Madura (Bodinayakkanur). It is sown in September-October. Picking commences in April and is completed in May; a second or summer picking is obtained in June-July, after which the plants are pulled out.

The total area under crop is some 350,000 acres of which about two-thirds is irrigated. The unirrigated crop is in every way inferior to the irrigated crop. The staple of good irrigated Cambodia is 1" to 1 1/8" and sometimes 1 1/4" with a ginning percentage of 33.

BURMAH COTTONS.—These cottons are largely exported direct from Rangoon or overland to China and are little known in India. The principal centres are Myingyan and Thayetmyo. The late type Wagri (*G. obtusifolium*) is grown around Thayetmyo and resembles Broach. The staple varies greatly, some samples being fully 0/8" whilst others are much shorter. These cottons gin up to 40 per cent. The early type *Wagale* is a mixture of different forms of *G. neglectum*. The average staple is considerably superior to Bengals but varies from 1/2" to 3/4". A pure type distributed by the Agricultural Department is 5/8" in staple, ginning 38 per cent. Promising results have been obtained with Madras Cambodia cotton in several parts of the Burmah cotton tract.

SHAN STATE COTTONS.—Little is known of these as they are largely exported overland. Types up to 1" staple occur, the average being about 3/4". A botanical survey of these cottons is still in progress.

Sowing and Picking Cotton: Normal Dates.

	Date of Sowing.	Date of Picking.
Dholleras*	July 1st to August 5th	January to April.
Broach	June 20th to July 20th	Do.
Oomras	June 15th to July 15th	October to January.
Barsi-Nagar—		
(1) Early	June 10th to July 31st	November to March.
(2) Late	Aug. 15th to Sept. 15th	March and April.
Kumpta	Do. do.	March to May.
Dharwar-American	Do. do.	February to April.
Westerns	Do. do.	Do.
Sind (Local)	May to August	October to December.
Bengal	April to July	September to January.
Punjab-American	March to May	October to January.
Karunganni	15th Oct. to 15th Dec.	April to July.
Cambodia	September to October	April to July.
Tinnevellys	October to November	March to August.
Burmah	May to June — Early	September to October.
	May to June — Late	January to February.

* The *Mathio* of Kathiawad, which is not a real Dholleras at all, though grown in the 'Dholleras' area, is picked much earlier, from October to December.

Spinning Qualities of Different Varieties of Indian Cottons.

Description of Cotton.	Blow-room Loss %.	Counts.	Remarks.
Bengals.			
United Provinces ..	9 to 11	8s/10s	Ordinary reeling of Weft yarn.
Rajputana			
Sind-Punjab Desi ..			
Broach.			
Broach-Ankleshwar ..	10	18s/20s	Weft yarn.
Surat	8	20s/22s	Warp.
Saw-ginned Dharwar	10	20s	,,
Punjab-American ..	9 to 10	20s/24s	,,
Navsari	7	30s/40s	30s Warp, 40s Weft.
Dholleras (Kathiawar)	14 to 16	20s/22s	Warp.
Kadi-Viramgaum ..			
Oomras.			
C. P. No. 1	7	12s/16s	Reeling.
C. P. No. 2	9	10s/12s	,,
Berars	11	12s/14s	,,
Khandwa-Burhanpur-Burva	14	16s/20s	Weft yarn.
Barsi-Nagar ..			
Jalna-Parbani ..			
Indore-Ujjain-Ratlam	14 to 15	16s/20s	,,
Khandesh	11 to 12	10s/12s	Reeling.
Mathia	14	10s/12s	,,
Hyderabad (Bhensa)	12	30s/40s	30s Warp, 40s Weft.
Umri Nanded	14	28s/36s	28s ,, 36s ,,
Southerns.			
Westerns	15	20s	Warp.
Northerns	14	20s	,,
Bijapur-Bhagalkot ..	15	20s	,,
Kumpta	13 to 15	22s/28s	,,
Miraj	12	20s	,,
Karunganni	10	24s	,,
Tinnevellies	9	20s	,,
Cambodias	9	28s/36s	28s Warp, 36s Weft.
Coconada	14 to 15	20s	Warp.
Burma	9	8s/10s	Reeling.

Rainfall in the Cotton Districts of India.

(1st June to 31st May.)

Season.	Dhulia.	Barsi.	Hubli.	Broach.	Rajkot.	Guntur.	Coimbatore.	Tuticorin.	Raichur.	Khamgaon.	Cawnpore.	Amritsar Jail.	Nagpore.
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.
1909-10 ..	19	22	24	42	28	26	14	15	26	27	34	29	51
1910-11 ..	29	37	28	46	34	46	24	8	20	27	29	30	59
1911-12 ..	8	17	18	16	6	30	23	26	21	23	25	14	50
1912-13 ..	14	16	36	54	32	23	30	30	10	17	31	24	49
1913-14 ..	22	17	21	43	27	27	13	17	17	27	20	29	49
1914-15 ..	31	29	34	42	39	37	23	44	36	39	28	34	46
1915-16 ..	21	36	22	18	12	41	23	18	25	32	51	13	49
1916-17 ..	40	45	26	52	38	54	25	12	48	42	46	34	65
1917-18 ..	25	44	32	54	42	47	23	31	42	35	37	35	51
1918-19 ..	9	11	19	12	8	25	20	23	20	13	14	15	36
1919-20 ..	31	21	25	44	38	37	23	28	24	24	36	16	53
1920-21 ..	12	17	16	21	17	21	22	29	14	10	22	14	27
1921-22 ..	27	23	25	40	27	30	22	19	26	26	46	16	30
1922-23 ..	21	18	27	30	17	27	24	31	19	34	47	20	44
1923-24 ..	21	21	22	10	11	31	20	25	12	30	49	18	43
1924-25 ..	29	18	32	23	29	35	40	24	18	26	46	24	38

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The Cotton Trade of Bombay.

A SEARCH into the origin of cotton spinning and weaving in India would take the enquiries far back into remote centuries, where the steady light of history is replaced by the brilliant, but much less reliable light of tradition and fable. We may be assured, at least, of the high antiquity of these industries by the form in which their story has come down to us, and it needs little imagination to suppose, that as soon as mankind began to spin and to weave in the home of the cotton plant, its fibre would at once be utilised. Whether the cotton plant has one or many homes is a question that is not likely ever to be satisfactorily settled. Mr. Henry Lee, F.L.S., tells in an interesting book, entitled "The Vegetable Lamb of Tartary," how Columbus was offered cotton yarn by the natives of the Bahamas and how he found the Cubans clothed in cotton garments. Pizarro and Cortez also found the Peruvians using cotton principally for clothing, having neither flax, silk or wool. When Vasco da Gama, at the end of the fifteenth century, went round the Cape of Good Hope and made his way to a point north of Zanzibar, he showed the way to succeeding travellers, who found the natives clad in cotton clothes of their own making. It was only in 1500 that cotton cloth was first brought from the coast of Guinea to London, while in India it has probably been used for three thousand years.

The title of Mr. Lee's book is taken from a story of a living lamb that grew on a tree, and was covered with vegetable wool. The home of this plant animal was naturally very remote, and two stories were current about it. One was of a lamb of flesh and blood that grew on a stem long enough to allow it to graze, and Sir John Mandeville is said, on his return from Eastern travel, to have declared he had eaten the flesh of the animal. The public expected nothing less from such a distinguished traveller. The other story was of very small lambs which were discovered when the pods of the plant opened. This version is decidedly more artistic than the other. Cotton is mentioned in the account of the invasion of India by Alexander the Great. The natives were observed to be wearing garments of surpassing whiteness, made from flocks or bunches of wool taken from trees, and it is likely that in remote districts, where hand spinning and weaving still exist, the processes of manufacture differ very little from those in vogue in the time of Alexander the Great.

Bombay as a Cotton Market.

The old order of things was changed in India not by gradual development, as in Europe, but in one movement of a few months' duration, when the first cotton spinning and weaving factory was built in Bombay in 1854. Situated within easy reach of the cotton-growing districts, Bombay proved eminently well suited for the expansion of the cotton trade not only for the requirements of its own spinning factories but for the export trade to Europe, the United States of America and to China and Japan. As a matter of fact Bombay now possesses a Cotton Market which is the largest in Asia and during several years a larger number of bales were exported from this city compared with Liverpool for the same period.

The Cotton Green at Colaba.

In the early days of the trade in Bombay, the cotton was dealt with on the Green in front of the present Town Hall. But the congestion thereby caused in the centre of the Fort led to its transfer in 1844 to Colaba. With its facilities for landing cotton brought by country craft, and for loading it for vessels in the harbour, and with the then ample open space around it, Colaba at that time was the most convenient situation for the trade. It could not however be foreseen that the greater part of the cotton would be brought by rail into railway yards, most of them at a distance from the Cotton Green, or that the cotton for overseas would be loaded into docks lying well north of Colaba, or that the spinning and weaving mills would spring up in all parts of the island, separated from the Cotton Green by buildings and population of an ever-increasing density.

The New Cotton Depot at Sewree.

Thus the necessity for improving the very deficient railway communications with the docks became increasingly apparent, and it was in the year 1894 that the idea of a Port Trust Railway was first proposed and approved of finally by a Commission in 1900. It was at the same time necessary to provide land for the displaced and congregated trades, and for the railway yards which had to be removed. It was consequently resolved to reclaim the area on a portion of which the new Cotton Depot now stands. The reclamation amounted to 571 acres, and added 4½ per cent. to the area of the island. It was carried out between the years 1907 and 1913 by dredging from the bed of the harbour, with surfacing of earth brought from Trombay and elsewhere. On this area is accommodated not only the Cotton Depot, but the depots for grain, seeds, manganese, iron, hay, bricks and firewood, in addition to Railway and Government stores yards. North of this lie the great Oil Depots connected by some miles of pipe lines with their own landing pier at Pir Pao.

Description and Cost of the Depot.

The total cost of the new Cotton Depot came to Rs. 163 lakhs and the whole of the 178 godowns have been taken up by the dealers and exporters and an extension seems necessary. The new Depot is thoroughly up to date and is situated within easy reach of the docks and with adequate communication with the long-distance terminals and the mill area.

The new cotton godowns are 178 in number, erected in twenty blocks, each block being 111 ft. long, 43 ft. wide and 30 ft. high. Each godown will accommodate 7,500 bales of cotton if stacked 18 bales high. The whole of the construction including foundation piles, ventilators, etc., is of reinforced concrete. The roofs are arched, and protected by a covering of Malthoid.

The work was finally sanctioned by the Port Trustees in August 1920, at an estimated cost of Rs. 1,30,16,667, and was started in September of the same year. Various additional works and improvements have since raised the cost to Rs. 1,62,62,000.

The construction of the godowns was completed by Messrs. J. C. Gammon (Bombay), Ltd., in December 1922, well within the stipulated period and the whole of the work throughout has been under the immediate charge of an old and valued officer of the Trust, Mr. Framji Ruttonji, Honorary Executive Engineer.

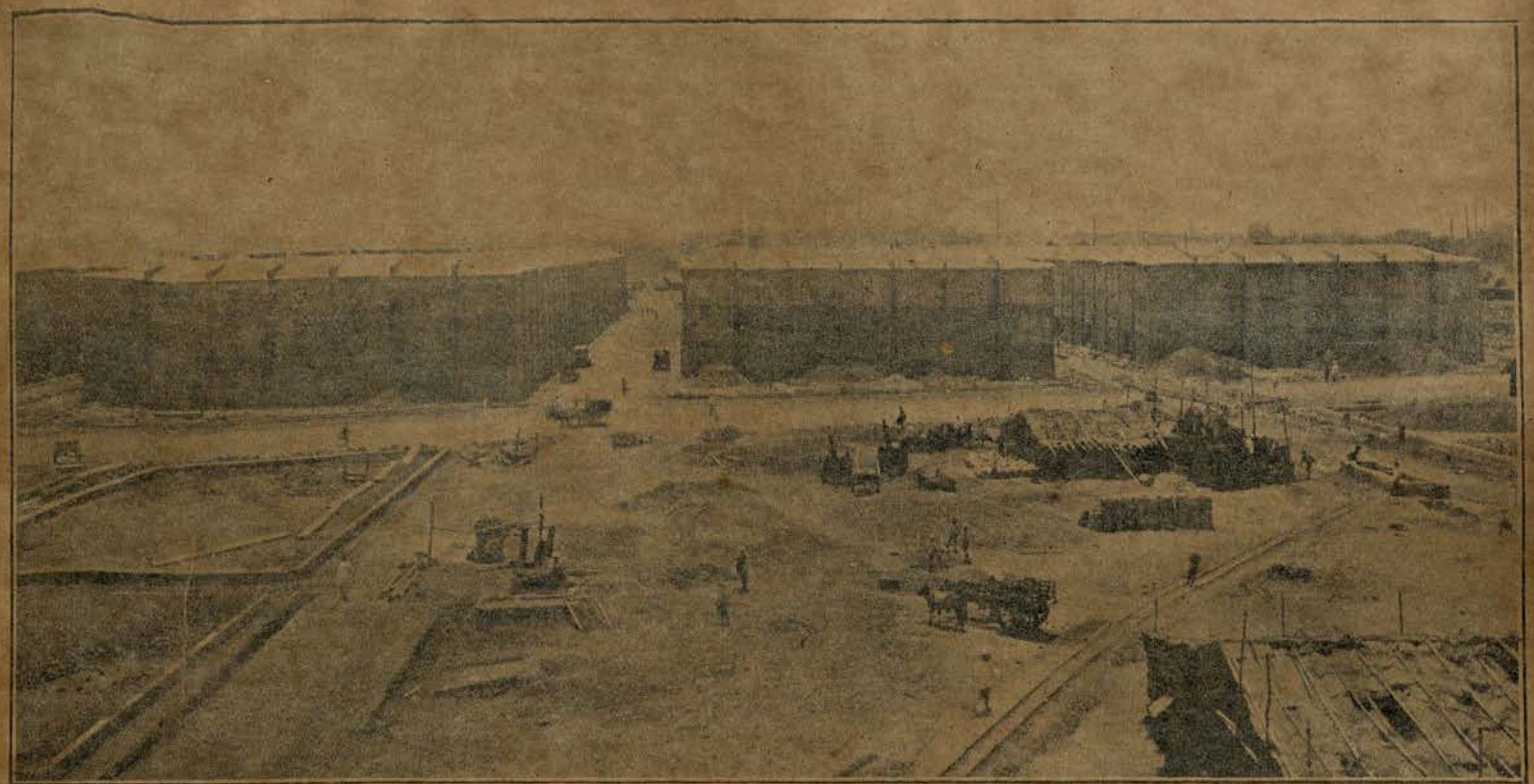
The Port Trust Railway is in full working order, and is the means of bringing cotton to the Depot, and of carrying it to the docks. Passenger traffic is provided for by the Harbour Branch of the G.I.P. Railway, which connects with Victoria Terminus, and ensures rapid communication with the rest of the Island and Salsette.

THE OLD COTTON GREEN AT COLABA WITH THE "COTTON EXCHANGE" TO THE RIGHT. [Special Photo.

THE OLD COTTON GREEN IN BOMBAY IN 1855. [Bom. Gazetteer
(With the Town Hall and Mint in the rear.)

Architects: J. G. Gammon (India), Ltd.

THE NEW COTTON DEPOT, 1925, WITH THE GOODS STATION.



THE NEW COTTON GREEN AND GODOWNS AT SEWREE, 1925. [*Architects: J. C. Gammon (India), Ltd.*

The East India Cotton Association.

Bombay is the chief port of arrival for merchandise on the western coast of India and is in railway communication with almost every place of importance in the country. It is also in communication with all other ports by means of lines of steamers which keep up a constant service. The position of the city on an island surrounded by the sea and communicating with the mainland only by a causeway, protects it from all excesses of high or low temperature and exposes it for the greater portion of the year to the sea breeze.

The extensive range of docks are fitted with every appliance for handling cargo, and for fitting the heaviest weight direct from the ship on to railway trucks, and the magnificent harbour, situated between the island and the mainland, offers unlimited shelter to vessels in rough weather.

Many circumstances combine to render Bombay the principal centre of the cotton industry in India, and chief among these is the moisture in the air which is greater there than at any other large city in India. Bombay is also the point of convergence of the cotton trade in Western India, both for export and import, and its imported supply of machinery and stores reach the factory with the least surcharge beyond freight.

Cotton pressing, which was formerly a large industry in Bombay, has now been diverted to up-country districts, it having been found that, by pressing at the ginning factories in the interior, there were considerable economies in cost, in addition to the saving of freight on pressed bales.

Until almost the end of the year 1917, the regulation of the cotton trade of Bombay was in the hands of several commercial Associations, all of which claimed to have some controlling voice in the regulation of the trade. A single agency for this purpose was first introduced under the Defence of India Act as a purely temporary measure. The Committee set up by the Government of India was known as the Cotton Contracts Committee and, under the chairmanship of Mr. G. Wiles, I.C.S., made the best of the situation then existing. In November 1918, however, just before the Armistice was signed, a Bill was introduced in the Bombay Legislative Council to provide for the control of dealings in cotton in the Presidency of Bombay and was passed in December 1918. The Cotton Contracts Board then continued to work, not under the Defence of India Act, but by virtue of the Act passed by the Bombay Legislative Council.

From then onwards the trade began to think of formulating the details of a permanent single commercial association to regulate the trade in raw cotton in Bombay and, on 25th July 1922, the first reading of the Bill providing for the constitution of the East India Cotton Association was moved in the Bombay Legislative Council and passed in September 1922. Since then the Association has, subject to its By-laws being approved by the Governor in Council, controlled the cotton trade of Bombay.

THE NEW COTTON EXCHANGE AT SEWREE. [Architects : J. C. Gammon (India), Ltd.

The New Cotton Exchange Building.

The new building, which was opened in December 1925, has been erected at a cost of over Rs. 18,00,000 and has been constructed upon the latest scientific principles and can be enlarged sufficiently when necessary to meet future needs for some decades. There are 12,072 6/9 square yards occupied by the building which has a frontage to the north of 1,800 feet and to the east of 650 feet, providing a satisfactory light for the examination of cotton of nearly 2,500 feet.

Rooms for 120 Buyers and 80 Sellers have been provided with an arbitration room capable of handling 300 to 350 arbitrations per hour. This accommodation is more than six times that available at Colaba and twice that of the temporary Exchange.

The Trading Hall, which is the first of its kind to be erected in the East, combines the features of both the New York and Liverpool Cotton Exchanges. The "Ring," which is a novelty to Bombay, is well known in the organised markets of the Western Hemisphere and will make conditions much more comfortable for jobbers and other traders and will provide distinct contrast to the old Bombay system under which business was transacted in the public road beneath the shelter of a tree and subject to interruption by rain and traffic.

Sir Purshotamdas Thakurdas, Kt., C.I.E., as President, with Mr. C. N. Wadia, C.I.E., and Mr. J. A. Kay, as Vice-Presidents, took considerable interest in forming the basis upon which the plans developed. Mr. Kay was succeeded as Vice-President by Mr. V. A. Grantham, who spent a good deal of time and thought in developing the plans and seeing that the needs of the trade were fully provided for. Major W. Ellis Jones who succeeded Mr. Grantham had seen that the plans were executed in accordance with the increased requirements of the trade. Messrs. Gregson, Batley and King were the architects while Messrs. M. G. Cervello and C. V. Sakalkar supervised the concrete and electric portions of the buildings, respectively. The contracts were carried through by Messrs. J. C. Gammon, Ltd., Rawji Sojpal & Co., D. R. Simpson & Co., Braithwaite & Co., Ltd., Bharat Flooring Tiles Co., and McKenzies, Ltd.

The Clearing House.

Of the various innovations which have been introduced since the Government came to assist in the control of the cotton trade, the one which has been acknowledged by all to have done the most good is the institution of a Clearing House for the cash payment on a fixed date twice every month of differences outstanding on forward contracts. This system of clearing differences by periodical payments came into being in Liverpool in 1882, *i.e.*, 120 years after the first import of cotton into that city in 1763 and 41 years after the first Association to regulate cotton trading was started in Liverpool. In Bombay it was introduced in 1918, that is, 43 years after the starting in 1875 of the first Association to regulate the cotton trade of Bombay.

The total amounts handled by the Clearing House in Bombay are as under :—

Year.	*Rupees.*
1921-22	12,98,94,566
1922-23	7,69,37,399
1923-24	9,16,95,270
1924-25	3,18,59,196

It is interesting to note that during the year 1923-24 the amount cleared at one settlement amounted to a crore and four lakhs of rupees and two months later another clearing amounted to a crore and eighty-eight lakhs of rupees, the highest clearing on record in Bombay.

The Board of Management for 1925.

Sir Purshotamdas Thakurdas, Kt., C.I.E., M.B.E., M.L.A., is the President and Mr. Haridas Madhavdas is the Vice-President. The members of the Board were:—Messrs. K. H. McCormack, W. G. McKee, M.L.C., Murlidhar Shrilal Chokhani, Kishan Prasad, T.H. Cartwright, Durgadutt Sawalka, Jamnadas Ramdas, Anandilal Podar, Lalji Naranji, M.L.C., C. P. Bramble, F. F. Stileman, Ratansey D. Morarji, Vassonji Haridas and Major W. Ellis Jones.

Rao Bahadur H. B. Kotak is the General Manager, Mr. D. Mehta the Secretary, and Capt. F. F. Wadeson, Manager of the Clearing House.

Bombay Cotton Market: the Largest in Asia.

The cotton market in Bombay is the largest in Asia and in several years during the last decade the number of bales which has passed through Bombay has actually exceeded the total for the corresponding period in Liverpool. The distribution from Bombay is roughly as follows:—

Bombay mills ..	10	lakhs Bales.
Japan	15	do.
China	4	do.
Europe and U.S.A.	6	do.
Total ..	35	lakhs bales.

The figures of arrivals into and exports from Bombay have been as follows:—

Year.	ARRIVALS. *Bales.*	EXPORTS. *Bales.*
1885-86	1,534,974	1,097,670
1890-91	2,062,732	1,171,661
1900-01	1,959,181	1,082,018
1910-11	2,498,817	1,768,254
1920-21	2,878,716	1,669,612
1924-25	3,634,164	2,770,314

The approximate value for the last four seasons has been as follows:—

Year.	*Average price* per candy.*	*No. of bales.*	*Approximate value Rupees.*
1921-22	420	3,462,479	72,71,20,590
1922-23	430	3,641,287	78,28,76,705
1923-24	550	3,291,494	90,51,60,850
1924-25	420	3,634,164	76,31,74,440

* The average price taken is of Oomras.

The Indian Central Cotton Committee.

THE Indian Central Cotton Committee, as constituted at present, is the creation of the Cotton Cess Act, passed by the Government of India in 1923. It should be remembered, however, that the Committee, in a somewhat different form, existed for a short time before the passing of the Act for which the efforts of the Committee are largely responsible. It was the Indian Cotton Committee of 1917-18 that recommended the creation of a Central Cotton Committee, and the Government of India, by a Resolution in the Department of Revenue and Agriculture dated 31st March 1921, announced their decision to form the Committee. Local Governments and Administrations were consulted and the views of various Chambers of Commerce and Trades Associations were obtained before the Government took the momentous step. These views and opinions were generally favourable to the formation of such a Central Committee. The original Central Cotton Committee was thus launched into existence early in 1921 and its present status and form and constitution were imparted to it in 1923 when the Cotton Cess Act was passed.

The Committee Before the Cotton Cess Act.

In the Government Resolution, dated 31st March 1921, the functions of the Committee were defined to be mainly advisory. It was composed of 26 members. One of them, the Agricultural Advisor to the Government of India, was its president. The twenty-five members were made up as follows:—The Agricultural Department in each of the seven Provinces, namely, Madras, Bombay (excluding Sindh), the Punjab, the United Provinces, Burmah, the Central Provinces and Berar, and Sindh had one representative on the Committee. The Director-General of Commercial Intelligence was also a member of the Committee. Each of the following bodies was represented by one member:—The East India Cotton Association, Bombay, the Bombay Millowners' Association, the Bombay Chamber of Commerce, the Ahmedabad Millowners' Association, the Karachi Chamber of Commerce, the Tuticorin Chamber of Commerce, and the Upper India Chamber of Commerce. The Government of the Central Provinces and Berar nominated two members from manufacturers or ginners. A similar representative was nominated by the Madras Government, as well as by the Punjab Government. There was a representative of Bengal and another from Lancashire. The Government of India nominated a member of the Co-operative Department. The States of Baroda and Hyderabad had a representative each, while there was a joint representative of the States in Rajputana and Central India. It was decided that the headquarters of the Committee were to be at Bombay. Bombay was represented in the initial Committee, during the year 1921-22, by such men as Mr. J. A. Kay, Sir Lalubhai Samaldas, Dr. H. H. Mann, Mr. V. A. Grantham, Mr. Mathuradas Vasanji and Mr. C. W. du Breuil. All the members were appointed for a period of two years. The secretary of the Committee was Mr. B. C. Burt, formerly Deputy Director of Agriculture, United Provinces. The Committee was thus fully representative of all sections of the Cotton Trade and Industry and also of the Agricultural Departments of the principal cotton-growing provinces. A little after the formation of the Committee, the Gwalior Durbar nominated a representative of its own on the Committee. The first meeting of the Committee was held in July 1921. The functions of the Committee were purely advisory in the beginning but as a central representative body it was practically charged with the promotion of all measures, which would aid the improvement of the important Indian industry of cotton growing. The Government had ordered that the cost of the Committee be met from Imperial revenues. In its early

meetings, the Committee appointed, in order to facilitate its work, four sub-committees to deal with Research, Local matters in Bombay, Machinery and Finance, respectively. Besides steps were taken without delay to establish provincial committees as unofficial branches of the Central Cotton Committee. In the first place there were provincial committees and in Madras local cotton committees were also established in important cotton centres. The secretary of the Committee, to whom great credit is due for the sound foundation of the work of the body, toured in different provinces to obtain information on various points in which the Committee were interested. Almost the first work before the Committee was the obtaining of sound information on every subject within their scope, *viz.*, how to produce better cotton, how to preserve the purity of the better cotton, how to apply modern science to the improvement of cotton, and above all, how to arrange to finance any steps that might be taken to solve these problems were some of the questions that confronted the Committee from the beginning. The idea of levying a cotton cess on bales of cotton either exported or used commercially in India had its origin in the desire to have a sufficient fund in hand to carry on the useful activities that the Committee proposed to undertake for the improvement of the cotton trade and the textile industry in this country.

The Cotton Cess.

At the first meeting of the Committee held on 21st July 1921, the subject of the cotton cess was discussed and the following four resolutions were passed unanimously:—First, that the Government of India be requested to reconsider the question of imposing a cotton cess to provide funds for the activities of the Central Cotton Committee and in particular to meet the cost of the Committee's proposals in respect of technological and agricultural research. Second, that the cotton cess should be levied on all the commercial cotton crop and not only on exports. Third, that a cotton cess should be levied of four annas per 400-lb. bale for a period of five years, but that the Government of India should have power to reduce the cess by executive order within the period at the request of the Indian Central Cotton Committee. Last, that the cotton cess should be collected from millowners and exporters and at the baling presses. The cotton cess was to be the means or the sinews of war for the Central Cotton Committee, and the tax to be levied was so small in amount and the advantages that were to follow from the Committee's activities were expected to be so great, that the Committee fully believed that public opinion would support it in its demand for the cotton cess. The Government of India had once before considered the question and not feeling certain of their ground had not taken any action. Representation from an influential and representative body like the Central Committee of course put the whole matter on a different basis, and it was not surprising that soon after the above resolutions were communicated to Government, the latter once more took up the question in all earnest and drafted legislation with a view to evolve a measure of far-reaching significance. The Cotton Cess Act of 1923 was the result.

Provisions of the Cotton Cess Act.

The Indian Cotton Cess Act was placed on the Statute Book in 1923. It extends to the whole of British India except Aden, and its object is "to provide for the creation of a fund to be expended by a Committee specially constituted in this behalf for the improvement and development of the growing, marketing and manufacture of cotton in India." The cess is levied on ginned raw cotton. The third section of the Act lays down that "there shall be levied and collected on all cotton produced in India and either exported from any customs port to any port outside British India or consumed in any mill in British India; a cess at the rate of two annas per standard bale of four hundred pounds avoirdupois, or in the

case of unbaled cotton, of six pies per hundred pounds avoirdupois: Provided that the cess shall be levied and collected at double the above rates until the expiry of three years from the commencement of this Act."

It is obvious that under the provisions of the Act two things become absolutely essential. The first thing is that accurate returns of cotton bales exported and consumed in the local mills should be submitted at stated intervals during stated periods. This is easy at customs ports as the customs authorities have to see, in any case, every article of export. But returns from the mills must be submitted by the mill authorities and they must be submitted faithfully. The second thing is thus the establishment of a suitable machinery for the collection of the cess. Regarding the returns of cotton consumed in each mill it is laid down that the owner of every cotton mill must furnish to the Collector of the district in which the mill is situated on or before the seventh day of each month "a return stating the total amount of cotton consumed or brought under process in the mill during the preceding month and that every such return shall be made in prescribed form." The form designed for the purpose gives all the necessary information about the mill also and states exactly the amount of cotton utilised in terms of 400-lb. bales and calculates from that the amount of cess due from the mill. The millowner, the managing agent, or some principal officer of the mill must certify the accuracy of the returns.

The Collector may visit the Mills.

At the exporting ports, the Customs' Collector is responsible for collecting the cess. It is also laid down that any sum recoverable as cotton cess from the mills may be recovered as an arrear of land revenue. As a consequence of the Collector's responsibility in the matter of collecting the cotton cess in the proper manner, he is empowered by a general or special order by the Local Government concerned to have free access at all reasonable times during working hours to any mill or to any part of any mill. He may pay his visits under this provision without any notice of his intention to the owner and may examine the working records, sale records and accounts of any mill and take copies of or extracts from all or any of the said records or accounts for the purpose of testing the accuracy of any return or informing himself as to the particulars regarding which information is required for the purposes of this Act or any rules made thereunder. Of course, all information acquired in this manner, is to be used for the purposes of the Cotton Cess Act only and to be kept absolutely confidential. If the Collector or any such officer discloses the information to any person other than a superior officer without the previous sanction of the Local Government he shall be punishable with imprisonment which may extend to six months and shall also be liable to fine. Proceeds of the cess, collected during the month, are to be handed over, on the last day of the month or as soon as possible after that, by the officer concerned, to the Central Cotton Committee constituted under the Act. The Committee are to pay their own expenses from the proceeds thus received and also the expenses they may incur on account of any measures undertaken by them for promoting agricultural technological research in the interests of the cotton industry in India. All such measures require the previous sanction of the Governor-General. Rule-making powers have been reserved by the Governor-General in Council and the Committee also are authorised to make rules, with the sanction of the Governor-General in Council, for facilitating the work of the Act. It will be thus seen that the Cotton Cess Act is really made up of two parts; in the first place it lays down the procedure for the collection of the cess and in the second place it has created and constituted the Central Cotton Committee.

The Central Cotton Committee.

The Central Cotton Committee, constituted under the Act of 1923, does not materially differ from the Committee that existed before the Act was passed. But it was invested with a definite constitution and its functions were laid down in detail, and with funds in hand it naturally became a powerful instrument for the promotion of progress of the cotton industry. According to the Cess Act, the composition of the Committee is as follows:—The Agricultural Advisor to the Government of India, as in the old Committee, is the president of the Committee; six persons are nominated each by the Provincial Governments of Madras, Bombay, the United Provinces, the Punjab, the Central Provinces and Berar, and Burmah to represent their Agricultural Departments. Then the Director-General of Commercial Department is an *ex-officio* member as before. The following bodies nominate each one person to be members of the Committee:—The East India Cotton Association, the Bombay Millowners' Association, the Bombay Chamber of Commerce, the Indian Merchants' Chamber, Bombay, the Karachi Chamber of Commerce, the Ahmedabad Millowners' Association, the Tuticorin Chamber of Commerce, the Upper India Chamber of Commerce and the Empire Cotton Growing Corporation. Four persons representing the cotton manufacturing or cotton ginning industry, of whom two are nominated by the Local Government of the Central Provinces, and one by each of the Local Governments of the Punjab and Madras. The Local Government of Bengal nominates one representative. The Governor-General in Council nominates one person having knowledge of co-operative banking. Ten persons representing the cotton growing industry in Madras, Bombay, the United Provinces, the Punjab and the Central Provinces and Berar of whom two shall be nominated by each of the five Local Governments. The States of Hyderabad, Baroda and Gwalior nominate one member for each of them. One person is jointly nominated by the Durbars of the Indian States in Rajputana and Central India. Besides, power has been reserved to the Governor-General to nominate more members by due notification in the *Gazette of India*. The present Committee is thus much more representative than the old one, and its utility has been therefore augmented to a considerable degree.

The Bombay representatives on the Committee at present are Dr. H. H. Mann, Director of Agriculture, Mr. W. Ellis Jones of the East India Cotton Association, Mr. S. D. Saklatvala of the Bombay Millowners' Association, Mr. J. A. Kay of the Bombay Chamber of Commerce, Sir Purshottamdas Thakordas of the Indian Merchants' Chamber, while Mr. B. F. Madon is the Co-operative representative. Besides, there are representatives from the mofussil. The Committee is a body, under the Act, whose dissolution can be brought about by the Governor-General in Council by a notification in the *Gazette of India*. The present Secretary of the Committee is Mr. B. C. Burt, M.B.E., I.A.S., and a Deputy Secretary, Mr. W. J. Jenkins, I.A.S., late Deputy Director of Agriculture, N.C.D., Bombay Presidency, has also been appointed. The work of the Committee has been much facilitated by the existence of the Act, and it may be briefly reviewed under separate headings for the purpose of convenience and clearer exposition of details.

The Work of the Committee.

The principal questions in which the Committee has interested itself from the beginning (1921) are regulation of gins and presses with a view to the prevention of the mixing of superior and inferior cotton, the improvement of the marketing of cotton in various centres, research work both in agriculture and technology useful to the promotion of the cotton industry as a whole, and last but not least, the collection and supply of accurate information. In all these matters the Committee, which is not necessarily a body of experts, has to rely upon the services of expert advisers, and such help has been throughout obtained

by the Committee. The Secretary of the Committee tours in the interest of the Committee to get and investigate into such help, and the Committee itself has appointed, as stated in an earlier paragraph, sub-committees to investigate each question. Apart from the research work carried on in laboratories, and apart from creating suitable centres where such work could be carried out with advantage, the Committee has taken the momentous step of sending capable research scholars to various centres with a view to train them in different subjects connected with cotton, and the Committee has been spending a part of these funds at its disposal in financing these students. In fact, the most important and permanent service that the Committee has been rendering to the country is by way of its well-spread efforts to promote research, because on accurate research and on the existence of a good number of technological experts depends the future progress of the cotton industry in this country.

The Purity of Cotton.

One of the serious difficulties in the way of the cotton trade from an industrial point of view is the habit of dealers of mixing superior cotton and inferior cotton and to pass it as superior cotton. It is obvious that such tricks always result in the loss of good name which is of the greatest importance in all commercial transactions. The Cotton Committee has been, therefore, tackling this question from the beginning and trying to regulate markets in such a way that the cotton going out from particular places should be of an ascertained quality, and in this respect the East India Cotton Association which rules the cotton market at Sewri, Bombay, has been co-operating with the Committee in a whole-hearted manner. Most of the mixing takes place at the ginning presses and therefore regulation of ginning presses has been a step on which the Committee has continuously insisted. Another way to get wholesome results in the matter is to restrict the transport of cotton with a view to prevent mixing. In both these matters the Committee has been able to achieve success to a remarkable degree. The Cotton Transport Act was passed by the Indian Legislature in 1923 and the Cotton Ginning and Pressing Factories Act was passed early in 1925. According to the report of the Committee for the year ending 31st August 1923, the Cotton Transport Act "enables Local Governments (by notification passed by resolution of the Provincial Legislative Council) to schedule definite areas for protection and to prohibit the import of outside cotton into such areas except under licence. It is intended that licences shall only be issued to meet genuine trade requirements and, in particular, to meet the needs of cotton spinning mills situated within a protected area; for such mills an annual general licence has been advised. An exception has been made to provide for trade samples and packages of cotton not exceeding 10 lbs. in weight which do not require licences. The passing of this Act has stopped a series of abuses, which have been spoiling the good name and lowering the value of Indian cotton. Prior to the passing of the Act not only short-staple cotton, waste and stained cotton was sent wholesale to long-staple areas, for mixing purposes, but *kapas* had been imported for the same purpose, the admixture taking place before ginning, thus severely handicapping the Agricultural Departments in their efforts to establish superior and uniform types over considerable areas. Entire substitution has also not been unknown, fully pressed bales of cotton having been railed to stations with a good reputation, for subsequent despatch to Bombay under a false description. The necessity of protecting areas growing long-staple or otherwise superior cottons, especially where an improved type is being introduced by the Agricultural Department, is obvious. Mixture in such cases is a direct economic loss which falls heavily on the grower and also on the spinner. The profits made by unscrupulous middlemen though considerable are much smaller than the economic loss which their operations cause. Indian cotton is marketed largely by territorial description and evidence

that cotton from a particular tract was really grown in that tract is of great importance to the cotton trade and every step that can be taken to make such evidence of origin reliable promotes confidence and leads to fuller prices being paid." The Cotton Transport Act is now applied over a large area, and is proving a great instrument for the promotion of objects for which it was devised. The Cotton Ginning and Pressing Factories Act was a further step in the same campaign. Many of the malpractices occur in the ginning factories and the Act "enables a purchaser at any stage to trace a bale of cotton to the factory where it was pressed and thence, by means of the press records, to the original owner. The ginning factory records provide information by means of which, in case of need, the chain of ownership can be carried further back. Thus the trade has been placed in a position to protect itself against abuse." The Act has led to another good result which is serviceable not only to the trade but also to students of economics and public men. Under the provisions of the Act, it has been made compulsory for the pressing factories to provide weekly returns of cotton pressed, throughout British India, and the resulting statistics is really of great importance. A method has been laid down for the marking of the bales, and attempts are in progress to induce Indian States where cotton areas exist, to adopt similar legislation within their territories. When that is done, the whole of the cotton areas in the country will be regulated in a proper manner in this respect.

Research Work

Early in the first year of the Committee's existence, the members unanimously agreed about the immediate necessity of research activities, both technological and agricultural, and since the cotton cess enabled the Committee to spend large amounts, the research work has been growing. There is a Technological Research Laboratory and also a Spinning Laboratory maintained by the Committee at Matunga, Bombay, and a competent staff has been engaged to work there. Research students are taken from time to time at the cost of the Committee to study at different places and there are about twenty students at present who are prosecuting their studies. An Agricultural Research Institute has been established at Indore. It is called the Institute of Plant Industry, and it is maintained by grants from the Cotton Committee as well as from several Durbars of Central Indian States. The Institute has adequate buildings and is fully equipped and has undertaken a "general study of cotton genetics and cotton physiology, for which, being situated in the largest homogeneous cotton-growing tract in India, it is admirably suited." The Research Laboratory in Bombay is also doing useful work. The Technological Research Laboratory, which includes a spinning laboratory, is situated at Matunga and has extensive buildings. It has got a large staff headed by a Director, who is Mr. A. James Turner, who was, before he came out to Bombay, professor of Textile Physics at the Manchester College of Technology. The staff of the laboratory includes a spinning master, six highly qualified research assistants, one statistician, one head tester, one senior tester, one electrician, one draughtsman, and ten junior testers and assistants. The work done concerns with spinning tests and tests on the standard Indian cottons. Of course, the problems that are sought to be solved in the Laboratory are of a highly technical character and their solutions will mean discovery of means to improve the cottons in India. A good deal of attention is also being given to experimental work on the fumigation of American cotton with a view to prevent the entry into this country of the boll weevil, a cotton pest which has wrought havoc in the cotton crops in the United States.

Collection and Supply of Information

The Committee issues, from time to time, information about the work it has been doing and in this task it has obtained the co-operation of the British Cotton Industry Research Association and the Empire Cotton Growing Corporation. It

is intended toundertake the abstracting of Indian agricultural literature on cottop investigations. There is full co-operation between the Committee and the Government Departments connected with cotton, and the Committee has been attempting to establish correspondence with public bodies not only in the Empire but also outside of it who are interested in similar questions. It cannot be said that India has made considerable progress in the matter of collecting and disseminating information about cotton. The statistics published by the Government in connection with cotton growing, the cotton trade and the cotton industry are still defective in some ways, andthere is a large field for the Central Cotton Committeeto explore and to work in this regard, and it would appear that it is fully alive to that. Pamphlets and leaflets describing the work carried on with the help of the Committee have been published. The Agricultural Departments have been doing a good deal of useful work in the matter of collection of statistics, etc., and the Cotton Committee must evolve measures to supplement and strengthen those efforts.

Finance.

Before the introduction of the Cotton Cess Act, the expenses of the Committee were defrayed by the Government of India. The cotton cess collected in the year ending on 31st March 1924 amounted to Rs. 12,86,995. It is estimated that about eight to ten lakhs of rupees per year will be the normal income from the cotton cess. The Committee has spent large sums in building and equipping the Matunga Laboratory and in assisting the Indore Institute. The staff of the Committee costs a good deal, as first-rate men are necessary to carry on the work undertaken in the laboratories. The depression in the cotton trade during recent years has naturally resulted in a somewhat gloomy outlook about the future, but the useful activities of the Committee are really in the nature of insurance against mishaps.

Open Cotton Markets.

One more activity of the Cotton Committee deserves to be noted and that is its efforts to substitute open markets for what may be called markets which are based more or less on secret transactions. Open markets are of great advantage to the cultivator as there is less chance of his being duped and made to receive lesser value for his product. The middlemen often swallow the due profits of the producers and even the Indian Cotton Committee of 1917-18 had recommended that the Berar system of cotton markets should be universally adopted. The advantages of open markets are "honest weighments, the abolition of unfair allowances, and the advantages of competition. It is recognised that these markets do not of themselves solve the whole problem enabling the grower to realise full prices for his cotton." The Committee suggested to the Government of Bombay that a provincial legislation to bring into existence open markets may be undertaken. The Government of Bombay accordingly undertook to draft a Bill, but unfortunately the matter has not made further progress. Unless one province takes a bold step in the legislation of this kind, it is not likely that other provinces will consider the matter, and Bombay is obviously the province where such a measure should be first adopted.

The Prospects of Cotton Growing.

The prospects for cotton-growing in India are immense; she is already the second largest producer in the world with an annual crop of 5 million bales over an acreage of 22 millions, and both the a[illegible] and the crop are to be increased

greatly by means of irrigation and improved agriculture. At present, however, the quality and yield are very poor, a very small proportion—one-fifth or less—having a staple of even one inch, and an acre yielding on an average only half of the produce elsewhere—less than 90 lbs. of lint. India produces now as much cotton of the shortest staple ($\frac{1}{2}$" to $\frac{5}{8}$") as the world can absorb, and even more of it, but her production of medium staples ($\frac{7}{8}$" to $1\frac{1}{8}$") is not greatly in excess of the present needs of her own mills. Defective methods and adulteration have been responsible for these failings.

Action has already been taken and the Indian Central Cotton Committee is making every attempt to double the produce and increase the staple to at least an inch and an eighth. Besides legislation and investigation of the methods, actual research work is being done in the Institutes now working at Bombay and Indore.

Investigation Work by the Committee.

The work of the Committee in the immediate future will be concentrated on investigations into the properties of a number of standard Indian cottons. For this purpose a supply of the following Indian cottons has been obtained :—1. Kumpta (Dharwar No. 1). 2. Dharwar-American (Gadag No. 1). 3. Surat (1027 A.L.F.). 4. Punjab-American (285 F). 5. Punjab-American (289 F). 6. K. 22. 7. Cambodia (Cambodia 295). 8. Northerns (Sircar No. 14). 9. Westerns (Sircar No. 25).

It is proposed to make spinning tests on these cottons under various conditions and to compare the results obtained. The majority of these cottons are available both in the baled state and in the form of kapas, and investigations of their properties will also be made in the Research Laboratory. At the same time similar tests will be carried out on two standard American cottons, one a typical long-staple and the other a typical short-staple American cotton.

It is proposed to continue from year to year these tests on the above standard cottons, and on certain other cottons which were not available from the 1923-24 season's crop, *viz.*:—Cawnpore American, C.A. 9; Bundelkhand, J.N. 1; Aligarh Cotton, A. 19; and Aligarh White Flower.

If these standard cottons are grown as far as possible under standard conditions each season the spinning and other tests carried out on them in the Technological Laboratory will provide information which should prove invaluable regarding the quality of the cottons and the changes produced therein by varying climatic conditions from one season to another. It will then be possible to issue each season a report on the quality of the different cottons, which will no doubt be a very useful complement to the information already published about the yield. When results have been obtained in this way for a number of seasons, a store of information will have been accumulated which will certainly be of use in a number of directions.

The Future.

The Indian Central Cotton Committee has a very useful future before it. As it gains more and more experience and undertakes and successfully solves problems of great importance, its scope will be more and more defined. According to the original recommendations, it is the Committee's business to advise the Central and Local Governments regarding questions of cotton policy, to recommend steps to promote better cotton growing, to even recommend better methods of collecting statistical information. Its scope is wide, and excellent arrangements for financing its activities have been made by definite legislation.

Factory Legislation for Bombay.

THE first signs of Factory Legislation for Bombay, as suggested by the Manchester manufacturers, were evident in 1875 when a Factory Commission was appointed by the Bombay Government to enquire into the condition of mill labour in the city where the cotton mills existed in a larger number compared with other parts of the country. Mr. F. F. Arbuthnot was appointed President of the Commission with the following members:—

Hon'ble Mr. J. K. Blythell, Sir Mangaldas Nathoobhai, C.S.I., Dr. Thomas Blaney, The Hon'ble Mr. V. N. Mandlik, Mr. H. Maxwell, Mr. G. A. Kitridge, Mr. Morarji Goculdas and Mr. Dinshaw Manekji Petit. The last two members represented the Bombay Millowners' Association.

After a careful enquiry the majority of the members voted against the proposed legislation, while the President and Dr. Blaney expressed themselves in favour of a Factory Act for India, and the matter was kept in abeyance for the time being. But the agitation by the British manufacturers did not stop long. Another attempt was made to introduce legislation and the first Factories Bill was placed before the Council of the Governor-General of India in 1879. The Bombay millowners raised a strong protest against the measure, pointing out that the proposed Bill was drafted on the lines of the English Act and the provisions were quite unsuited to the conditions prevailing in the Bombay factories. However, the Indian Factories Act came into force in 1881 but the millowners in Lancashire did not seem satisfied with its provisions and another attempt was made to improve the conditions of labour in India which were represented to be in an appalling state. It should be noted that the Bombay millowners themselves had expressed their desire more consistently than any other body for factory legislation on a fair and equitable basis. But nothing could abate the jealousy of Manchester. Their chief spokesman was Mr. Holt-Hallet who carried on regular propaganda work, spreading the most mischievous rumours regarding conditions prevailing in factories in India. He was to speak on this subject at the International Congress of Hygiene and Demotraphy which was to be held in London in August 1891 under the Presidency of His Royal Highness the Prince of Wales (afterwards King Edward VII). The Chairman of the Organising Committee of the Congress addressed a letter to the Bombay Millowners' Association inviting them to send one or more representatives at the Congress. The Association selected Dr. K. N. Bahadurji, M.D. (London), a distinguished physician and surgeon and a highly popular citizen of Bombay, who attended the Conference and exposed the hollowness of the arguments of Mr. Holt-Hallet with considerable success; and even after the Congress had been dissolved Dr. Bahadurji carried on the campaign in the public Press, and in this he received valuable help from Sir Frank Forbes Adam, Sir George Birdwood and Sir William Wedderburn. Dr. Bahadurji also made an appeal to the London *Times* which, true to its traditions and its love for British honesty, admitted that it had been misinformed by Mr. Holt-Hallett. For narrating his experiences at the Congress and the work he had done Dr. Bahadurji addressed a representative public meeting on his return to Bombay concluding with the following remarks:—

"The result of my appeal to the *Times* in the cause of truth, in the cause of the well-being of thousands of our artisans, the welfare and development of our

industry, the rise and growth of our country, and the glorification of the humane British rule in India, is known to you all."

THE LATE DR. THOMAS BLANEY, C.I.E.

THE LATE DR. K. N. BAHADURJI, M.D. (London).

Opposite Views by Millowners; The Views of Sir Dinshaw Petit, Baronet.

While Dr. Bahadurji's exertions saved the Bombay mills from the drastic and unworkable legislation that was proposed, there were conflicting opinions among millowners who were against or in favour of a modification of the working hours and other conveniences for the workpeople. It will therefore be interesting to recall the statement* which Sir Dinshaw Petit, the First Baronet, submitted before the Factory Commission of 1884 as the leading millowner of those days.

Sir Dinshaw in his statement opposed stoutly the introduction of factory legislation and argued that other labourers had more arduous duties than the mill-hands, that the Legislature had no right to interfere between contracting parties with regard to a particular kind of work, that legislation, if needed, should be equally applicable to all classes of labour, and finally stated that if the working hours in his mills were curtailed by legislation, he would introduce the system of payment of piece-work. On the subject of holidays, he considered that four day's leave in a month was quite sufficient for any millhand, that there could be no objection to a mill operative cleaning the machinery for three or four hours on a holiday, and that if four days' holidays in the month were to be definitely fixed, the arrangement should be applicable equally to the factories of Calcutta and Madras.

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* Memoir of Sir Dinshaw Petit (First Baronet), by S. M. Edwardes (I.C.S.), C.S.I., C.V.O.

In proof of his contention that millhands in Bombay were not over-worked, Sir Dinshaw claimed to have positive information that his weavers, after leaving the mill, worked privately on their own account up to 9-30 p.m. On the subject of the employment of children, he pointed out that the Indian worker married at an early age, and that if the employment of children in factories were restricted, the worker would have great difficulty in supporting his family, which usually consisted of five or six children. In his opinion boys of nine could be safely employed. In the matter of women also he deprecated any interference with existing conditions.

It is perhaps needless to state that these views did not command universal acceptance, and certainly did not commend themselves to Lord Lansdowne's Government. In the Act, which was subsequently passed (1891), the hours of employment for women were limited to eleven per diem; the minimum age for children was raised from seven to nine years, and the maximum from twelve to fourteen. They were only to be employed for seven hours, and that in the day time. All workers in a factory of any age or sex were to have a weekly holiday.

The Factories Act of 1891.

After the incidents we have related the cotton factories in Bombay continued to work under the Factories Act of 1891. However in the year 1906, the Textile Factories Labour Committee was appointed to enquire into the conditions of factory labour in India by the Government of India on the recommendation of the Secretary of State for India. The Committee consisted of:—

Commander Sir H. P. Freer-Smith, R.N., late Superintending Inspector of Dangerous Trades in England, President; Members: Lieutenant-Colonel J. F. Maclaren, M.B., I.M.S., Civil Surgeon, Allahabad, and Dr. J. A. Turner, M. B., D.PH., Health Officer, Bombay Municipality.

The Factory Commission of 1907 and the Act of 1911.

The Committee presented its report and a Commission was appointed in 1907 by the Government of India to investigate into the questions referred to this Committee, and the various suggestions and recommendations which that Committee had made. The Commission consisted of:—

President:—The Hon. Mr. W. T. Morison, I.C.S., Officiating Member of Council, Bombay.

Members:—Mr. W. A. B. Beaumont, Superintending Inspector of Factories, England; Mr. S. M. Chitnavis, Deputy Commissioner, Central Provinces; Lt.-Col. C. MacTaggart, I.M.S., Inspector-General of Prisons, United Provinces; Hon. Sir Alexander McRobert, nominated by the Upper India Chamber of Commerce; Dr. T. M. Nair, Municipal Commissioner, Madras; Mr. John Nicoll, nominated by the Bengal Chamber of Commerce; Sir Vithaldas Damodar Thakersey, nominated jointly by the Bombay Chamber of Commerce and the Bombay Millowners' Association. Secretary:—Mr. J. Campbell, I.C.S., Under-Secretary to the Government of India, Department of Commerce and Industry.

The Commission made its report in due course and the ultimate result was the passing of the new Factory Act of 1911 which came into force on July 1st, 1912.

The Factories Act: Amendments and Additions.

The Act of 1911 laid down certain principles regarding the regulation of the conditions in factories; it did not however provide for the comfort and safety of the workers to the fullest extent. As was common in those days, Government did not interfere with the management of industrial concerns, and thus the various factories practically made their own rules and regulated their workers almost just as they pleased. The hours were long, there were no restrictions regarding the employment of women and children, and the safety of the workers was not ensured in an efficient manner. In ten years more, however, the state of affairs had materially to alter for two important reasons. Labour became articulate during the period and learnt to utilise the weapon of strikes. The post-war labour legislation in European countries also had influence on the action of the Government in this country. It should be remembered, however, that the Indian Factories Amendment Act, passed in 1922, was influenced, not by what are called the Geneva Conventions, but by pressure of opinion in the country itself. Labour in India is still not very well organised, and a very large majority of workers do not yet belong to any Trade Union. But, it should be noted, that the strikes which have taken place indicate that labour can unite and make its voice heard.

The legislation effected by Government in 1922 (The Indian Factories Amendment Act) added some important clauses to the Factories Act of 1911 and materially helped in ameliorating the condition of persons working in factories. Government strengthened their hands by appropriating more powers to inspect the factories and to keep within the rules passed for their conduct, but the amended clauses regarding hours of employment and holidays laid down a new principle altogether and considerably promoted the well-being of the workers. The sanitary provisions laid down in the Act are also of great importance and their strict observance must reduce to a minimum untoward incidents that are likely to happen pretty often in a factory less efficiently conducted. Women and children are also prevented from doing certain dangerous operations.

Protection of Women and Children.

In summarising and explaining the more important sections of the Indian Factories Amendment Act, relating to labour, the important clauses regarding the prohibition of employment of women and children in certain dangerous work deserve notice at the outset. Sections 19, 19A, 19B, and 20 of the Act deal with this subject. It is clearly laid down in Section 19, that "no woman or child shall be allowed to clean any part of the mill-gearing or machinery of a factory while the same is in motion by the action of steam, water or other mechanical power or electrical power, as the case may be, or to work between the fixed and traversing parts of any self-acting machine while such machine is in motion by the action of any power above mentioned." It should be explained here that, according to the Act, "child" means a person who is under the age of fifteen years. A sub-section of 19 gives power to the inspectors of factories to prohibit the employment of children if in their opinion the presence of children involves danger or injury to their health. The inspector under such circumstances can issue a written order to the manager of the factory concerned. A further sub-section still widens the scope of the principle laid down in Section 19. It provides that no person under the age of eighteen and no woman shall be employed in any factory in any of the operations specified in part first of the Schedule, or in any operation involving the use of lead compounds. The first part of the Schedule referred to includes, in the category of the prohibited processes, the following:—(1) Work at a furnace where the reduction or treatment of zinc or lead ores is carried on.

(2) The manipulation or treatment or reduction of ashes containing lead, the desilverising of lead, or the melting of scrap lead or zinc. (3) The manufacture of solder or alloys containing more than ten per cent. of lead. (4) The manufacture of any oxide, carbonate, sulphate, chromate, acetate, nitrate, or silicate of lead. (5) Mixing or pasting in connection with the manufacture or repair of electric accumulators. (6) The cleaning of workrooms where any of the processes aforesaid are carried on. It is also laid down that no woman or child shall be employed in the part of the factory for pressing cotton in which a cotton opener is at work. The enforcement of these sections has substantially ameliorated the condition of women and children workers in the factories and constitutes a great advance over the state of affairs in the days of *laissez faire*.

Hours of Employment and Holidays.

The most important question, in connection with the improvement of the lot of labour, however, centres round the hours of employment and holidays. The idea of holidays is rather new in this country and there are still a large number of offices, conducted in the orthodox Indian style, where according to theory no holidays are given and where the employees are expected to be twenty-four hours servants in the literal sense. The setting apart of one day in the week as a full holiday on which the worker may do just as he pleases is certainly a novel idea in India and this condition of popular mind naturally reflected in the management of factories as well. But as in Western countries so in this country, it gradually became clear that efficiency was of greater importance than mere length of time put in, and so the principle that to aid efficiency, fixed hours of work and regular holidays were absolutely necessary, began to make, at any rate, some impression upon the public mind. In the old days the factories used to make the workpeople undergo a 12-hours day and there were cases in which they were employed for fourteen hours. No differentiation was observed regarding women and children. It may be noted that in the middle years of the last century the same state of affairs prevailed in British factories and even humanitarian statesmen like John Bright were dead opposed to factory laws on the ground that industry must be left alone. No wonder that in India where industrialism is a plant of recent growth, the improvement of labour conditions was for some time looked upon as a device to aid the foreign manufacturer against the manufacturers in this country. We live in a different age now and the provisions laid down in the Act of 1922 regarding the question of hours and holidays are accepted to be just and beneficial. Of course, there are people who want an eight-hour day, but even the world politicians who gather at Geneva are not yet near to it. In India the demand for a ten-hour day and for fixed holidays came from labour itself and the demand was reiterated by several philanthropic millowners and Associations. The fourth chapter of the Act contains all the clauses in this connection and their study convinces one that great care has been taken in improving the working day both as regards its length and amenities.

Under the amended Act, no person shall be employed in a factory for more than sixty hours in any one week, and no person shall be employed in any factory for more than eleven hours in any one day. In practice, however, days of uneven length do not work satisfactorily and thus a ten-hours day has been established. It is also provided that there shall be one-hour or half-hour periods of rest in each working day. Under the rules, however, option has been given to employees to determine whether they are anxious for this period of rest. After all a ten-hours day is a ten-hours working day and the periods of rest lengthen it to the extent to which rest is taken. In practice, however, there are periods of rest fixed at all factories. The principle of one full holiday in the week has been enforced by the Act, and that day need not be a Sunday if there is a holiday in the course of the week which the workers would like to have. Thus, if the employees are

Hindus, they would rather like to have holidays on the days of their religious festivals rather than on Sundays, and holidays are fixed on this principle in practice, of course provided that there shall be at least one holiday each week. It is also laid down that the substitution of holidays described above must not result in any person working for more than ten consecutive days without a holiday for a whole day.

Children as Workers.

It is laid down that no child under twelve shall be employed in a factory and that he must be certified by a surgeon qualified for the purpose of giving the necessary certificate under the Act that the child is fit for employment in a factory. No child can be employed for more than six hours in any one day and before half past five o'clock in the morning and after seven o'clock in the evening. Children are thus half-timers and always being twelve years old when their employment may begin, their education before employment may take place under normal circumstances, and even during the time that they are employed, part of their day may be utilised for further studies if they wish to do so. As a matter of fact, it would appear, either owing to economic pressure or lack of adequate facilities, the spare hours are rarely devoted to education.

Night Work: Prohibition for Women and Children.

Regarding the employment of women, the provisions are the same as regards hours and holidays, though night work (from 7 p.m. to 5-30 a.m.) is prohibited in case of women as in the case of children. There is a further provision laid down which enjoins that the same person, man, woman or child, cannot be employed in more than one factory on the same day. It is unlikely, except in very rare cases, that an adult, man or woman, who has already worked for ten or eleven hours in one factory, would again think of securing work for the rest of the day in another factory. Women cannot work during the night, thus their double working in the manner contemplated by the provision is also impossible. But the provision appears to be really intended for children. They are half-timers, and the interval between 5-30 a.m. and 7 p.m. during which they can be employed consists of thirteen and half hours, and parents or guardians who are anxious to get as much money out of their children as possible are likely to be tempted to put them in two different factories in each of which they may serve for the full period of six hours. There are ways in which the trick may be pulled, for instance, by registering under two different names. In that case, the manager of a factory will not be able to find out whether the child works at another place. Section 25, therefore, is mainly operative in the case of children. In the case of adults, there is little occasion to apply it. There is a further provision that lays down that the manager of a factory shall fix specified hours of work for each person employed in his factory, and no person shall be employed except during such hours. This provision, so essential in the case of adults and so beneficial to them, may occasionally help unscrupulous parents in getting double employment for their children as described above. Vigilance, however, on the part of the Inspectors of Factories and the managers, must reduce such cases of fraud to a minimum. One of the rules of the Act lays down that a man may work in two factories and still may not break Section 25, provided his total work during the day does not exceed ten hours. Procedure has been laid down in the Indian Factories Act for the purpose of bringing to book all offenders, managers or others, against the provisions of the Act. On the whole, the provisions about hours and holidays and employment of women and children have bettered the condition of the workers and Indian factory legislation in these matters is now on a level with the practice in the most civilised countries of the world.

Compensation for Cotton Mill Workers.

The amendment of the Indian Factories Act of 1911, effected in the year 1922, marked a definite advance in the labour legislation of the country, and the next natural step in the direction was provision for compensation of workmen who may be disabled, partly or totally, in the course of their working hours while on duty. This important piece of legislation was inspired by similar measures adopted in Western countries for bettering the condition of workers, and during the short experience of the Workmen's Compensation Act gained in the last two or three years in India it has been proved that the measure is necessary and beneficial. The passing of the Act by the Legislative Assembly and its coming into force on July 1st, 1925, constituted an important item in the creditable record of the first Parliament of India. It may be stated that up to the time of the passing of the Act, employers could not be legally sued for personal injury to a workman except in a case where the negligence of the management could be proved in a court of law as the cause of the injury. The main point of the new Act is that compensation must be given according to the scale prescribed in all cases of partial or total injury, except when the injury is the result of the drunkenness, or the disobedience or the negligence of the workman himself. Barring the e exceptions, and the employer must prove them in each instance to the satisfaction of the Commissioner, the very fact of partial or permanent disablement or death entitles the workman or his dependents to compensation. Provision had to be made in the Act for the judicial proceedings involved and special officers called Commissioners have been appointed under these provisions. All claims for compensation under the Act must go before the Commissioner and Civil Courts have no jurisdiction in the matter.

The Act is an elaborate one, as several definitions have to be accurately laid down for the guidance of Commissioners. Just as it was necessary to make adequate provision to compensate *bona fide* workmen who received injuries, fatal or otherwise, in the course of their duty, it was also essential to see that the employers were not made to pay extravagant or doubtful claims. The Act is evidently a measure for the welfare of labour, but its provisions are absolutely fair in its dealings with the employers who are really protected by the Act against absurd claims.

The Definitions.

For the purposes of the Workmen's Compensation Act, "minor" means a person who is under fifteen years of age, and "adult" means a person who is not under it. The definition is the same as in the Factories Act. A clear meaning is sought to be given to the word dependent, as in case of the death of a workman, compensation is to be given to those who are his dependents. The Act lays down, (2 (1) *d*) :—"Dependent" means any of the following relatives of a deceased workman, namely, a wife, husband, parent, minor son, unmarried daughter, married daughter who is a minor, minor brother or unmarried sister, and includes the minor children of a deceased son of the workman, and where no parent of the workman is alive, a paternal grand-parent. The definition is widely comprehensive and has been obviously framed to meet the intricacies of the joint family system. When death is the result of an injury, it is unnecessary to define the extent of the injury, but in all other cases it is most important to ascertain the degree of the injury and the consequent disablement because the degree of disablement will determine the amount and also the duration of compensation. In the first place injuries are divided into temporary and permanent and secondly they are classified as partial and total. Each of the two latter classifications may be either temporary or permanent. It has been laid down that the employer

shall not be liable to pay compensation in respect of any injury which does not result in the total or partial disablement of the workman for a period exceeding ten days. The saving clause is necessary to ensure that a workman who is able to resume normal work after ten days or earlier shall not make a claim for compensation. Partial disablement is either temporary or permanent. When temporary, it means such partial disablement as reduces the earning capacity of a workman in any employment in which he was engaged at the time of the accident resulting in the disablement. When permanent, it means such partial disablement as reduces his earning capacity in every employment which he was capable of undertaking at the time. On the other hand, when there is total disablement, temporary or permanent, it means that the workman is incapacitated for all work which he was capable of performing at the time of the accident which resulted in such disablement. Injuries are thus to be valued from one hundred per cent. downwards.

The Valuation of the Injuries.

The valuation of the injuries is given in the Schedule I of the Act for the guidance of all concerned, and it has been explained that total permanent disablement has taken place, either when there is, as the result of an accident, permanent total loss of the sight of both eyes or when a combination of injuries makes the aggregate loss of earning capacity according to the specifications in the schedule equal to one hundred per cent. The schedule is interesting and the valuation that it contains is based upon similar laws in other countries and is therefore as fair as it could be. A list of injuries deemed to result in permanent partial disablement is given and each item in the list is assigned a particular percentage of loss. The loss of right arm above or at the elbow is put down at 70 per cent. Then (1) the loss of left arm above or at the elbow, (2) the loss of right arm below the elbow, and (3) the loss of leg at or above the knee is each put down at 60 per cent. Further, (1) the loss of left arm below the elbow, (2) the loss of leg below the knee, and (3) the permanent total loss of hearing is each put down at 50 per cent. The loss of one eye is put down at 30 per cent. while as explained just above, the permanent loss of the sight of both eyes is taken as permanent total disablement. The loss of thumb is put at 25 per cent. while the loss of all toes of one foot is put at 20 per cent. The loss of (1) one phalanx of thumb, (2) index finger, (3) great toe, is each put at 10 per cent., and the loss of any finger other than the index finger is put at 5 per cent.

Occupational Diseases.

Schedule III gives the names of occupational diseases and the contracting of any of these diseases or of anthrax (in case of a workman who is employed in employment involving the handling of wool, hair, bristles, hides or skins) by a workman shall be deemed to be an injury by an accident for purposes of the Act, and a workman may claim compensation on that account. The occupational diseases at present comprise lead and phosphorus poisoning and their results, but the Governor-General has reserved the power to add to the list after giving due notice in the *Gazette of India* and also of declaring certain employments as employments that result in the scheduled diseases. All these diseases have to be certified by, of course, qualified medical men and compensation must be claimed before a certain period after the injury has elapsed.

Protection for the Employers.

The employer is protected against unjust claims in various ways. Sections 11 and 12 of the Act and the exceptions enumerated in Section 3 lay down these ways. It has been stated before that an employer is not liable to pay compensation in respect of an injury which does not result in the total or partial disablement of the workman for a period exceeding ten days. It is laid down, further, that the employer's liability does not arise if the accident can directly be attributed

to (*a*) the workman having been at the time under the influence of drink or drugs (*b*) the wilful disobedience of the workman to an order expressly given, or to a rule expressly framed, for the purpose of securing the safety of workmen, or (*c*) the wilful removal or disregard by the workman of any safety-guard or other device which he knew to have been provided for the purpose of securing the safety of workmen. It is, however, stated that the exceptions will not apply in the case of death or permanent total disablement in respect of any workman employed in the construction, repair or demolition of a building or bridge. In Sections 11 and 12 the employer is protected in another way. If a workman notifies an injury and within three days of such notice if the employer offers to have him examined free of charge by a qualified medical practitioner, the workman must submit himself for such examination. If the workman refuses to be so examined or in any way obstructs the examination, his right to compensation shall be suspended during the continuance of such refusal or obstruction. Of course, if the workman had sufficient cause for the refusal (which cause he must prove) the Section shall not apply. Also, if a workman, before the expiry of the period during which he is liable to be required to submit to medical examination, voluntarily leaves without having been so examined the vicinity of the place in which he was employed, his right to compensation shall be suspended until he returns and offers himself for such examination. In the case where the workman dies without having submitted for such medical examination, the question of the payment of compensation is left to the discretion of the Commissioner. Thus, while the employers can ascertain the injuries to their satisfaction before they agree to pay compensation, the workmen, unless they run away from it and foolishly refuse to submit to medical examination, are not likely to lose it in all just claims.

Wages as Compensation.

As compensation is usually payable in terms of wages, it becomes an important matter to calculate wages for the purpose. In such cases the usual custom is to take an average of wages for a continuous period instead of the wages for a month or a week, and the custom has been followed in regard to the practice of the Act. If a workman is in the continuous service of an employer who is liable to pay compensation, for a period not less than twelve months, his average wages for a month will be one-twelfth of the total wages for twelve months which have fallen due for payment to him. The twelve months will be the last months before the accident. In cases where the workman was not in employment continuously, the monthly wages are calculated in the following manner:—A workman has worked for a certain number of days preceding the day of the accident. His total wages for those days amount to a certain figure. This figure is multiplied by thirty and divided by the number of days. In other words, his wages for a month are calculated on the basis of a thirty-days month. In order that the service should be continuous, it is necessary that the period should not be interrupted by absence of more than fourteen days. Payments are made through the Commissioner with whom the employer must deposit the amount of the award in case of payment after death. The Commissioner must use his discretion in apportioning the amount between the dependents of the workman. In some cases the Commissioner has practically to act for some time as the guardian of the dependents.

The Commissioner's Court.

The Court of the Commissioner has the status of a Civil Court, and lawyers may represent before him the different parties in cases of disputed or intricate claims. For the province of Bombay, the Workmen's Compensation Commissioner is Mr. N. M. Patwardhan, B.A., LL.B., Bar-at-Law, whose office is situated at the Old Custom House, Bombay. Similar Commissioners have

been appointed in provinces where there are large factories, but in the case of Bombay alone the Commissioner happens to be an Indian gentleman. The Commissioner has been armed with powers necessary for the discharge of his duties, and all questions such as whether a person who is injured is a workman or not, or whether the employer is liable to pay compensation, are to be settled by the Commissioner. Every Commissioner is a public servant within the meaning of the Indian Penal Code. The Commissioner may in cases of doubt get the ruling of the High Court.

Amount of Compensation : Fatal Injuries.

The award of compensation is ruled by strictly laid down principles in which the maxima of payment are clearly indicated in each case. That means that the Commissioner has to exercise his discretion within defined limits. So the employer knows that his liability has a strict limitation. From the employers' viewpoint such limit is absolutely necessary. An employer is liable to pay compensation when personal injury is caused to a workman by accident arising out of and in the course of his employment. The amount of compensation has been regulated in an elaborate manner and below is given a summary of the arrangements proposed. First, there are the cases in which the injuries are fatal. In such cases, when an adult is the victim, the compensation will be a sum equal to 30 months' wages, or two thousand five hundred rupees, whichever is less. It has been laid down that the maximum wages of a workman for the purposes of the Act will be Rs. 300, that is to say, persons earning more than that do not come under the operation of the Workmen's Compensation Act. But the provision just quoted indicates that for the purpose of compensation the maximum wages per month are taken to be Rs. 83-5-4. All wages above this figure are to be paid as compensation at this rate. This is really the most important provision in the Act for regulating the burden of the employer in the matter of compensation. In the case of the death of a minor the amount of compensation will be two hundred rupees. Before one is tempted to criticise this low figure and to blame the framers of the Act for attaching such little monetary significance to the life of a child, it should be borne in mind that after-death compensation is payable to the dependents of the victim, and in the case of the minor the dependents are not likely to be as helpless dependents as they may be in the case of an adult. After death comes permanent total disablement. In fixing compensation in such cases, it is to be remembered that the workman, whether adult or minor, becomes absolutely helpless and dependent and the sum that is prescribed is practically the capital for a small annuity that will bring to the victim about Rs. 10 per month. It serves the purpose of a pension. It is laid down that when permanent total disablement occurs in the case of an adult as a result of injury, compensation payable to him will be equal to forty-two months' wages or three thousand five hundred rupees whichever is less. In the case of a minor the compensation will be equal to eighty-four months' wages or thirty-five hundred rupees whichever is less. The equality in the monetary compensation to be given to the adult and the minor is explained by the fact that what the Act practically contemplates is a small annual pension just sufficient to keep the body and the soul of the victim together. In theoretical fairness, it might be argued, the minor should get even a larger compensation than the adult, but from a practical viewpoint the equality laid down appears to be fully justifiable.

Permanent Disablement.

Then we come to permanent disablement. It has been already stated that when there are more than one injury, and when their total strength becomes one hundred per cent., the disablement is to be considered as total. The provision protects both workmen and employers. The work-

man can get the maximum of compensation under the arrangement while the employer is not liable to pay more than the maximum even if the total amount of injury exceeds one hundred per cent. In cases where partial permanent disablement takes place as a result of an injury, the valuation of loss detailed in an earlier para is to be taken into account and *pro rata* compensation is to be awarded. The principal point to be remembered is to ascertain to what extent the earning capacity of the workman has been affected. It may be affected from one per cent. to one hundred per cent., and the compensation will be regulated by the percentage. There are, however, injuries that are not specified in the schedule which gives the valuation of loss, and in all such cases the same criterion is to be applied, namely, the extent of the loss of the earning capacity is to be carefully ascertained and *pro rata* compensation to be awarded. Of course, in all such cases, much will depend upon the view that the Commissioner may take about the extent of injury, but as years pass by and practical experience is gained in administering the Act, the exact or at any rate the approximate valuation of several injuries not indicated in the schedule will be a matter of comparatively easy calculation. In fact, it is quite likely that the schedule itself may be enlarged from time to time and exact valuations of injuries may be incorporated in it. For some time to come, however, an inexact state of affairs is bound to continue to a certain extent.

Temporary Disablement.

The problem of compensation becomes still more difficult when we consider temporary disablement. The Act lays down the following principle in connection with this kind of disablement. A temporary disablement is that which will disappear after a certain period and the maximum period for the purpose is taken to be five years. When the disablement pertains to an adult, payments are to be made to him half-monthly during the disablement or five years (whichever is less) at the rate of fifteen rupees or a sum equal to one-fourth of his monthly wages, whichever is less. Thus a temporarily disabled person will get not more than thirty rupees per month for not more than five years. In the case of a minor, the monetary maximum is the same, but it is laid down that he will receive a sum equal to one-third of his monthly wages, or one-half if he has attained the age of fifteen years. The amounts to be awarded in temporary disablement are comparatively larger and for obvious reasons. The victim is expected to recover and even to be under treatment during the period. Regarding half-monthly payments, payable in cases of temporary disablement, procedure for reviewing the decision from time to time has been laid down, and either the workman or the employer may apply to the Commissioner for review. This power of review is necessary for the protection of both the parties. Compensation is to be paid only during the period of disablement, and the moment the disablement ceases to exist, the compensation should in fairness stop. It is in the interest of the employer to keep an eye on the condition of the workman whom he is paying compensation for temporary disablement, and he will naturally ask the Commissioner to review the award if he (the employer) feels that undue advantage is being taken by the workman of the award. On the other hand, as injuries are looked after and treatment proceeds, they might be found to be more serious or any such circumstance may make the workman review his position. Then he may approach the Commissioner to proceed to review the case. All compensations payable under this Act may be deposited with the Commissioner who will make arrangements, in such cases, to pay it to the parties entitled. The receipt of the Commissioner shall be a sufficient discharge in respect of any amount thus deposited with him. The Commissioner also possesses many discretionary powers which enable him to arrange that money will be promptly and rightly paid.

All the processes such as giving notice within a time limit are resorted to and have to be resorted to under the Act, and mistakes in the matter are likely to result in loss to those who make the claims. The Commissioner is a regular judicial officer of the Government with a special and limited jurisdiction, and the fact that he has been given a large number of discretionary powers is due to the circumstance that for some time to come he has to look to the welfare of the workmen who are often ignorant as far as it comes within the four corners of the Compensation Act. As usual, the power of making rules under the provisions of the Act for the proper administering thereof, has been vested in the Governor-General and the Provincial Governments; and the Government of Bombay have accordingly made a number of rules in connection with the Act.

Employer's Insolvency.

One more important point in the Act deserves notice, and that is regarding the insolvency of the employer. If the employer insures the risk of Workmen's Compensation created by this Act, then the rights of the employer at the time when he is to become an insolvent or when he is making arrangements with his creditors, against the insurers as respects that liability shall, notwithstanding anything in any law for the time being in force relating to insolvency or the winding up of companies, be transferred to and vest in the workman. Of course in no case will the liability of the insurers to the workman be greater than their liability to the employer. It is further laid down that if the liability of the insurers to the workman is less than the liability of the employer to the workman, the workman may prove for the balance in the insolvency proceedings or liquidation. This provision makes the position of workmen safe when the risk of compensation has been insured and when claims for compensation almost coincide with the preparations for insolvency or liquidation.

Millowners' Mutual Insurance Association, Ltd.

The Millowners' Mutual Insurance Association, Ltd., was formed in 1924 for insuring employers' risks under the Indian Workmen's Compensation Act, 1923. Until the establishment of this Association the rate decided upon by the Tariff Insurance Companies for cotton mills risks under the Workmen's Compensation Act was Re. 0-8-0 per cent.* On the recommendation of their Insurance Adviser, the 'Mutual' decided to charge half the tariff rate, that is Re. 0-4-0 per cent., and immediately this decision was arrived at, the Tariff Companies endeavoured to frustrate the 'Mutual' by reducing their rate to the same figure. Thus had it not been for the 'Mutual' the original rate of Re. 0-8-0 per cent. would, in all probability, not have been reduced. Another important result of the formation of the 'Mutual' was the drastic lowering of rates for fire insurance by the Tariff Insurance Companies, which was brought about by the 'Mutual' having discussed the possibility of extending its activities to Fire Insurance business.

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* Report of the Bombay Millowners' Association.

Labour Unions and Workers' Associations.

The Trade Union movement made its entry into the industrial life of Bombay through the efforts of a few outsiders who took interest in labour problems. A good deal of welfare work had however been done in the interest of the working classes, the pioneers being the Bombay Social Service League, an institution that came into existence through the inspiration of the late Mr. Gopal Krishna Gokhale. The League has been conducted with praiseworthy energy and ability by Mr. N. M. Joshi, a prominent member of the Servants of India Society, with the help and co-operation of citizens willing to devote their spare time in the good work which the League has been doing. Till about 1920, the Social Service League was the principal institution that interested itself in the welfare of the mill workers, and it carried on its activities in several mills with the consent and co-operation of the millowners. This work was later on taken over by the mill agents themselves and for the last six years the League has ceased to have any direct connection with welfare work in the local factories. But the credit of initiating the welfare movement in the mill industry in Bombay should be given to the Social Service League, and to its energetic general Secretary, Mr. N. M. Joshi.

At the present day a large number of mills have regular welfare centres which arrange for night schools, magic lantern shows with lectures on useful subjects by citizens who are invited from the general public. Innocent amusements are provided during the Holi and other holidays which were usually enjoyed by workmen in a manner that was revolting to their neighbours and society. These centres are maintained by the managements of the mills concerned and they have been placed in charge of a competent and well-paid staff.

There are various welfare problems concerning the textile worker; if he is without his family, as is the case with many millhands in Bombay, his moral behaviour has to be looked after in more than one way. The drink evil is always prominent and the indebtedness due to loans from shop-keepers and money-lenders which engulfs most of the workers is a hard problem. The welfare centres have, however, been trying to solve the problem by developing Co-operative Credit Societies and there is no doubt that the effort will meet with some measure of success.

The Trade Unions, however, claim that they have the right and the responsibility of looking after the welfare of their members, though, as a matter of fact, they have not hitherto paid any attention worth mentioning to welfare work. Up to the present, the Trade Unions have been almost exclusively interested in handling the question of wages.

The Kamgar Hitwardhak Sabha.

Another association, of long standing, that has taken a great deal of interest in the general welfare of the textile workers, is the Kamgar Hitwardhak Sabha which was brought into existence in 1909. It is composed of a few local residents and of some mill officials who are technically workmen but who are of a different class and better in social conditions. The history of the Sabha does not indicate persistent activity in any particular direction, and there have been occasions in the history of Bombay strikes when vehement workmen have disowned the leadership of the prominent men of the Sabha. It must be admitted, however, that the Sabha has been an instrument of some good work, and that it must be taken as a welfare society for the good of the working classes. It was founded by Messrs. B. R. Nare, S. K. Bole and H. A. Talcherkar. The last two gentlemen along with Dr. S. W. Patil are the present honorary secretaries while

the chairman is Rao Bahadur Manaji Rajuji Kalewar, a prominent contractor. The three secretaries have been useful to the workmen in special ways. Mr. Talcherkar's legal advice as a barrister is at the disposal of those who take the help of the Sabha, and as a medical man Dr. Patil has also given his services for the benefit of the millhands. Mr. Bole has been a member of the Bombay Legislative Council for the last six years and was, therefore, in a position to raise points of labour interest in that assembly. During the days of the strike in 1925 the Sabha put in considerable good work in the interest of the workers. It is understood that the Sabha has got 300 members and the annual fee is one rupee per head, and it tries to inculcate the virtue of temperance on the worker's mind.

The objects of the Sabha are as follows:—

(1) to give relief to workmen in indigent circumstances;
(2) to promote education among them by means of night classes and instructive lectures;
(3) to wean all workers from harmful customs;
(4) to find them help in times of stress;
(5) to settle amicably disputes between employers and employed;
(6) to render work-people medical and legal help when necessary; and
(7) to make all efforts to ameliorate the condition of the working classes generally.

Textile Unions.

Before 1925, the Textile Trade Unions in Bombay were not properly organised. There were some Unions but no organised attempt was made to put them on a sound basis. At present there are in all five associations that can be called Trade Unions. The most important among them is the Bombay Textile Labour Union while each of the remaining four is called the Girni Kamgar Mahamandal (Mill Workers' Association). The four Mahamandals are specified by their localities and these are Chinchpokli, Parbhadevi, Colaba and Gorupdeo. The origin of these four Unions is the same. An association called the Girni Kamgar Sangh (Mill Workers' Association) was started in 1919 by Mr. Laxmi Raoji Tairsee and Mr. Kanji Dwarkadas with a view to promote the interests of the mill operatives in the city. The beginning was made with 75 members, the secretaries being Mr. Kanji Dwarkadas, merchant, and Mr. D. R. Mayekar, a storekeeper in the Colaba Land Mills. For some years the Sangh was practically in a moribund condition but in 1923 Mr. D. R. Bhatwadekar, a jobber in one of the Bombay mills, was elected the President of the Sangh which was given the more imposing name of Mahamandal (large Association). Mr. Mayekar, however, subsequently started another Union at Parbhadevi and gave it the same name, *viz.*, the Girni Kamgar Mahamandal, and he also started the other Unions, one at Colaba and the other at Ghorupdeo. The first Mahamandal is now at Chinchpokli. The objects of all the Mahamandals are the same and are quoted below:—

(1) To get all mill workers to join the Mahamandal in order to enable the Union to obtain sound financial support.
(2) To increase temperance among members and to inculcate in them principles of sanitation and hygiene.
(3) To educate the children of mill workers.
(4) To improve conditions of housing.
(5) To provide free medical attendance and medical aid.
(6) To endeavour to improve conditions of work in the mills.
(7) To make known to all millhands the Factories and the Workmen's Compensation Acts.
(8) To open libraries and reading rooms for the benefit of members.
(9) To co-operate with all other Unions in improving the conditions of all classes of working men and women.
(10) To take all necessary steps effectively to carry out all these objects.

MR. N. M. JOSHI, M.L.A.

MR. S. K. BOLE, M.L.C.

Members of the Textile Unions with Mr. S. H. Jhabwalla, Secretary, in the centre (sitting).

These four Associations are managed entirely by the workers, including the managing committees and the officials, there being no room for outsiders. The intention and endeavour of the managers of these Unions is to avoid and even to deprecate all outside interference. The following description of each of these Unions indicates the possibilities and the limitations of their work:—

(1) *The Chinchpokli Girni Kamgar Mahamandal.*—This is the original Mahamandal, the direct successor of the Girni Kamgar Sangh, started in the year 1919, the Mahamandal itself being established under the new name in 1923. Mr. D. R. Bhatwadekar is the President and Mr. V. G. Sadvelkar the Secretary. It has secured about 180 members, the entrance fee and the annual fee being one rupee.

(2) *The Parbhadevi Mahamandal.*—This was started in August 1925, and has a membership of 618. The entrance fee is one rupee while the monthly subscription is four annas only per member. Mr. A. A. Alve is the President and Mr. D. R. Mayekar the Secretary.

(3) *The Colaba Mahamandal.*—This was also started in August 1925, its present President being Mr. Dhondu M. More and the Secretary Mr. A. K. Jadhav. There are about 720 members with one rupee as the entrance fee and four annas as the monthly subscription.

(4) *Ghorupdeo Mahamandal.*—This was formed in December 1925, with Mr. S. A. Murkar as President and Mr. S. J. Khamkar as Secretary. The entrance fee and the monthly subscription are one rupee and four annas, respectively, with 205 members on the roll.

The Bombay Textile Labour Union.

The Bombay Textile Labour Union is of the most recent growth and is reckoned as the most important Textile Trade Union in Bombay. It was formed in January 1926 and may be said to have been born out of the 1925 strike of the millhands in Bombay. The strike was due to the reduction of wages effected by the Bombay mills on account of continued depression in the textile industry. The strike continued for about 2½ months and ended on 1st December 1925 on the suspension of the Excise Duty. Over 9,000 workers have joined the Union, the monthly fee being annas four only. The principal feature of the Union consists in the office-bearers being almost all outsiders, unlike the case of the four other Unions or Mahamandals, which indicates that the workpeople have realised the necessity of availing themselves of outside guidance. Mr. N. M. Joshi is the President of the Union while Messrs R. S. Asavle, F. J. Ginwalla, S. K. Bole and S. H. Jhabwalla are Vice-Presidents.

The number of workers in the Bombay mills comes to about 150,000 while the membership of all the Textile Unions taken together does not exceed 11,000, which shows the condition of infancy in which the Trade Union movement still exists in Bombay. And when it is taken into account that the largest Union among the five we have described is managed by men who are not themselves workers, the question naturally arises whether there is any possibility of all the textile workers organising themselves into one 'combine' in the near future.

It should also be noted that recent changes in the Indian Factories Act and the passing of the Workmen's Compensation Act constitute important strides in state legislation in the interest of labour. The private welfare work is being thus supplemented by Government and the Legislature, and while labour has yet no direct voice in law-making it has friends and supporters in the legislative chambers and thus the welfare and well-being of the mill operative have progressed satisfactorily, and should contribute materially towards a better understanding between capital and labour.

The Life of the Millhand.

We have referred on pages 323-327 to the limited capacity of the Bombay mill operative and his irregular habits despite increased earnings. Compared with field labour the work in a factory is necessarily more exacting and regular but the prospects of higher wages and the lure of city life have attracted thousands of up-country people to Bombay from the Konkan and Deccan districts. It should, however, be borne in mind that agricultural conditions in the *Konkan* and the *Deccan* differ very largely. The soil in the *Deccan* or *Desh* is fertile and the yield per acre of crops is far larger than that in the *Konkan* where man has to wrestle with nature to obtain food-grains. The natural consequence is that the man who works on the *Konkan* land is capable of harder work than the man who works on the *Desh* land. The *Konkan* Maratha is accustomed to prolonged work and being very poor he has little pride. The *Desh* Maratha is altogether different. That is perhaps the reason why the *Konkani* worker stands Bombay life better. He is also accustomed to the climate on the sea coast. But the man who comes to Bombay from the *Desh* sees the sea for the first time in his life and it is very difficult for him to adapt himself to the climatic and other conditions in Bombay. He works really under a handicap compared to his brother workman from Ratnagiri.

In the mofussil, people are still accustomed to kind rather than to coin and their wants being extremely limited, money plays considerably less part in rural economy. Bombay has the lure of money and the poor man in a village, whether in the *Konkan* districts or in the Deccan, imagines that a new world will open up to him if he goes to the city. Then in large families, land is unable to maintain all the members and the chances of employment in one's own village or in the neighbouring villages are few and far between. Cash is also required if weddings are to be celebrated with some pomp, and it is also required if the money-lender is to be paid. Most of the people who come out as wage-earners to Bombay are usually workers on land under the system of *khandā*. That is to say, a man agrees with a landed proprietor that he would look after his land and do everything necessary, and share the produce in a certain proportion with him. The proportion he gets is barely enough for keeping together the body and soul of the family. On the other hand, the custom has now been growing, on the part of the landlords, to take their proportion in coin instead of in kind, and it thus becomes necessary that there should be one or two earning members in a family who will bring in money. Thus the money that the millhands send from Bombay to their families, goes in many cases to pay the landlord and the money-lender.

At the same time by contact with Bombay the simple life of the village is considerably changed. Tea has made great progress among the younger generation and thus there is more demand for sugar and milk while other luxuries and even some vices have been introduced into the village life by men and women who have intercourse with Bombay and the cost of living has increased as a consequence. There are instances of millhands having taken to their villages the curse of venereal diseases, the white plague and other ailments.

It has also been found that the millhands who come to work in Bombay die an early death in a large number of cases and the older people in the villages still deprecate the idea of sending out their sons for factory work. In the village, open air and limited wants are advantages that cannot be obtained in the city, and the increased earnings thus appear to old people as more of a delusion than a comfort.

Higher Wages Compared with Graduates.

Many a mill worker, however, earns an amount which appears tempting to the members of the clerical community and even to graduates. Even useless villagers who would not be able to earn anything outside Bombay earn in the mills as much as Rs. 20 per month. A man who reaches the position of an assistant carding or spinning master may get as much as Rs. 175 per month. Of course, the number of men earning such high wages is not very large in a mill but the number of people who get wages between Rs. 50 and Rs. 75 may run into thousands. Women workers may earn as much as Rs. 40 to 50 per month.

The percentage cost of living in 1925 was as under :—

Food	56.8
Clothing	9.6
Rent	7.7
Fuel and lighting	7.4
Sundries	18.5
	100.0

In the case of workmen, we must again remember that, unlike the members of the lower middle class, almost all adult members, male and female, in a workman's family earn something. Even children between 10 and 15 add something to the family purse. That does not happen in the village where employment is not easy to get. But in the village every member of the family, except the decrepit and the small children, help in the work in the house as well as the field. The workman, therefore, is economically a stronger unit of society than a clerk or a graduate who has to maintain a large number of dependents most of whom do not earn a pie.

At the same time a large majority of workmen who had been accustomed to a standard of life that was based between the monetary limits of Rs. 5 and 10 per month suddenly see money that they had never dreamt of and owing to the queer conditions under which they have to live in Bombay they often take to ways that lead to unfortunate results. When we take into account the fact that nearly three-fourths of the male workers in Bombay mills live without their families or lead a single life, we need not be surprised at the fearful increase in prostitution that has taken place in the city. It would be inaccurate to say, at any rate with reference to workmen who come from Ratnagiri, that they learn the taste of drink for the first time after their arrival in the city. As is well known, *toddy* is a general and favourite drink all along the sea coast, but in Bombay the habit picks up different channels and the workman spends on drinks more in a month in Bombay than he would do in a year in his village.

Factory Holidays : the Shimga or "Holi" Festival.

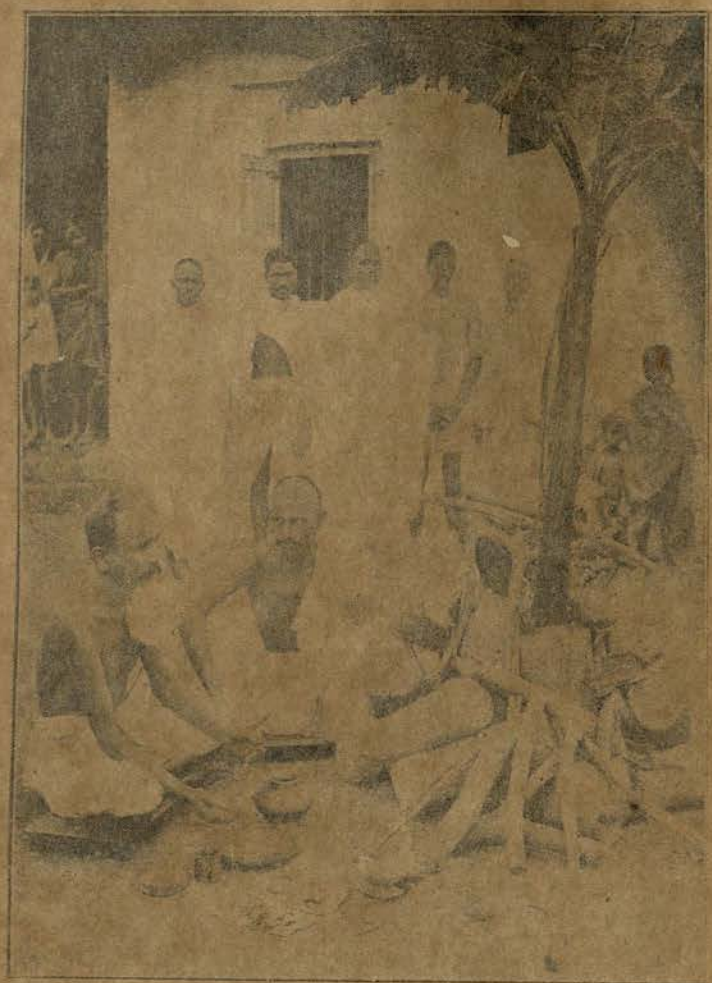
Every month in the Indian calendar has a day set apart for some special observance, solemn or gay, and the jolliest of all is the Shimga or the Saturnalia of spring, to which Hindu residents look forward with pleasure. The Bombay millhand, however, revels in it with the keenest zest and compared with his exuberant antics the enjoyment of this holiday by the better classes of the Daskshani Maratha communities is a tame affair. The latter are confined to parties and refreshments on the first night when *abir* and *gulal* (scents and red powder) and saffron-coloured water are thrown over snow-white garments worn specially for the occasion. The women appear on these days in the finest *saris* and garments and enjoy the dancing and singing of the neighbours in their own circles.

How the Millhand Enjoys his Holiday.

It is, however, different with the millhands because the advent of the Shimga is proclaimed some days before by the tom-toming, singing and dancing rehearsals in the mill districts. In the factory itself, the first note of the approaching festival is struck of a morning by a full-mouthed yell, the meaning of which is not to be mistaken. It is a solitary yell by a cheery workman from some distant corner, and it may be heard over and over the din and clatter of machinery. But soon the fit is on ; it is irresistible, and the shout bubbling over the lips bursts out at length from several throats, its rapid explosion being rendered intermittent by the tapping of the hand on the open mouth. That sound is the genuine Shimga yell known as "*bombe*," the moral significance of which sends a thrill through female frames and, for the matter of that, through the frames of the sterner sex when these happen to be adjusted on sensitive lines. It is a sign of thoughtless outburst in language and gestures which had continued to be indecent for years but is now being checked under better counsel.

The millhand then takes his holiday and indulges in dancing and singing in the streets. The Kolis or fishermen, with their simple get-up and peculiarities, lend themselves easily for imitation, and the millhand mimics (Bahurupis) transform themselves without much effort into male and female fisher folk, playing their music and singing the old songs and tripping their easy and grotesque dance, and imitating their drunken brawls and unsteady gait. The fishing smacks are not forgotten. They are made of bamboo framework and paper and the rigging, which is profusely dressed with coloured paper flags, forms the main feature of the pleasant show. A millhand who is active and supple is selected as the central piece of the performance. The boat hangs by the waist, and heaves and tosses on imaginary waves as the dancer warms up to his work, and hops about and gyrates to the tune of the primitive music of his companions. The gaieties usually take place on a beautiful moonlit night when a big hole is dug in the ground to receive heavy logs of wood, and a bonfire is kindled therein round which a crowd gathers. Sometimes the bonfire is lit before a temple, and sacrifice is offered in the shape of choice flowers, vegetables and fruits, and the rites are performed by the priest of the family or of the temple. At the time of worship a plantain tree is set up firmly between the logs. This celebration of the bonfire is termed the *Holi*.

(*Continued on page 492.*)



The "Shimga" or "Holi" Festival: Performing the Ceremony.

The ceremonial over, the worshippers as well as the spectators stand up around the *Holi* shouting the "*bombe,*" whilst the drum and tasha beat louder and louder like crackers fired in succession. The remainder of the night is spent in singing, dancing and playing. The day which follows the *Holi* fire is termed the "*Dhool*" or the dust-storm day, on which groups of old and young millhands may be found roaming about, drinking toddy or liquor and freely indulging in throwing red powder at one another's faces, and rubbing it down playfully. In the village of the millhand there is one common bonfire lighted in the central place, and every family has to contribute its share of firewood or cowdung cakes and other necessaries for the offering, and the headman of the village alone has the prerogative of igniting the fire. That is a much coveted right, regarded as a great honour among the villagers and it is jealously guarded. The cotton mills are closed for two or three consecutive days to enable the workpeople to enjoy the holidays.

Worshipping the "Munja" or Outside Spirit.

Spirit-possession is a subject in which a very large proportion of the people of India believe. This is particularly the case in the Deccan; and just as the people of the ancient Palestine ascribed many forms of physical or mental diseases to the influence of a malignant spirit, so among the lower classes of the Deccan and the mill-hands the belief in the frequency of spirit attacks is universal, particularly among women. Common report divides these spirits into two main classes, namely, the house spirits, whose influence is confined to the family to which they belong, and the outside spirits who attack people indiscriminately. The accompanying sketch depicts a Brahmin youth worshipping at the shrine of one of the most widely-known of the outside spirits, the "*munja*."

[*S.M.E.*
Worshipping the "Munja" or Outside Spirit.

The "*munja*" is the ghost of a Brahmin boy, who has undergone the "*Upanayana*," or thread ceremony, but has died before marriage. The ghost, which is supposed to reside generally in a pipal tree (*Ficus religiosa*), is addicted to attacks upon women, scorching them with fire, and making them sick or barren; and he wreaks summary vengeance on anyone who throws stones at his tree or otherwise disturbs him. The victims of his attacks seek to appease him by girding the pipal-tree with a "*munja*" or sacred thread, and by building a platform round its roots. The pipal, the platform and the little shrine shown in the picture stands on the bank of the river Bhima below the temple of Siddheshvar, about half a mile east of the town of Khed in the Poona district.

A BRAHMIN PRIEST.

THE CHILD GENERATION OF MILL WORKERS.

THE WORKMAN (who has lost his sight) AND HIS FAMILY.

A factory girl and her brother who was brought up at one of the Créches in the "Welfare" centre.

The group below shows the depressed class of workers. The women help each other in the search for lice or fleas in the hair.

THE LABOURING CLASSES IN BOMBAY. [Photos Y.M.C.A.

Housing of the Mill Operatives.

THE housing of the cotton mill workers in Bombay has been one of the most difficult problems which Government and the employers had to face. The city had been overcrowded to a dangerous extent in many parts and as the mills have been concentrated in larger numbers in the northern district the congestion in the neighbourhood of the factories had been particularly heavy. The insanitary condition in which the mill operatives and their families lived in dark and ill-ventilated quarters were a source of danger to their health and physique and it often happened that the mill worker left far better and cleaner surroundings at the factory when he went out after a day's work to enter filthy and over-crowded rooms where light and fresh air were invariably absent.

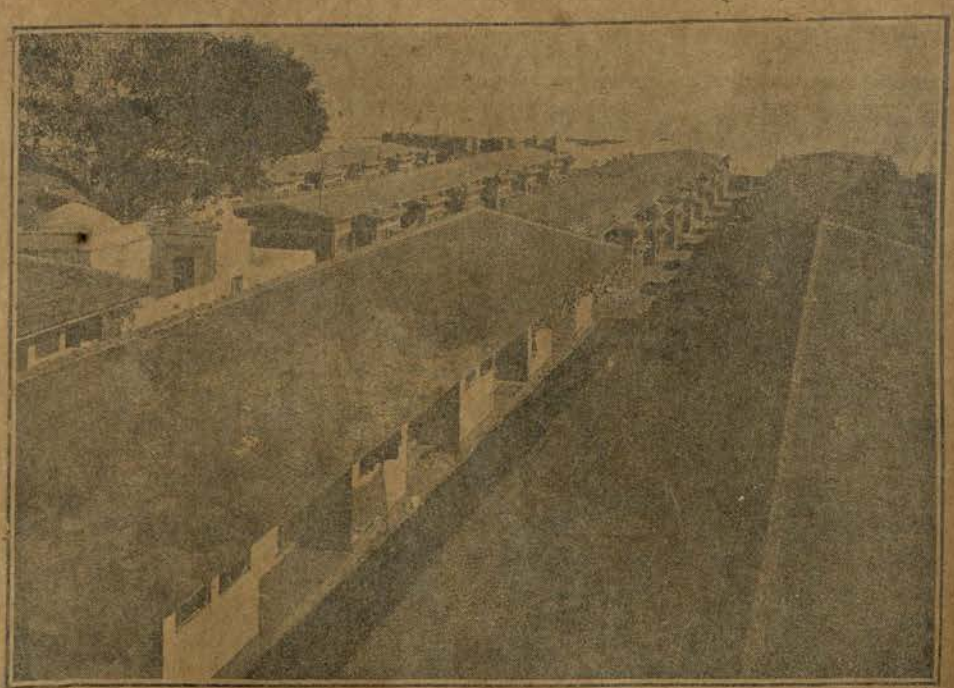
Improved housing accommodation was, however, supplied even in pre-war days by certain millowners for their workpeople, but the ignorance and apathy of the latter were disheartening, and in fact the employers found that the rooms were not occupied in comfort by their own workpeople but by outsiders or the friends and relations of the millhands. In one case as many as 40 per cent. of the total number of tenants in a mill chawl turned out to be outsiders who had no connection whatever with the millowners who had supplied housing accommodation for their own workpeople. Thus the dwelling accommodation for the millhands remained neglected in proportion to the number of mill operatives in the city and the Government of Bombay, realising the acute shortage and impressed by the gravity of the problem, decided, during the year 1920, upon a vast scheme of construction including the provision of 50,000 tenements for the poor classes. For the first time in the history of this Presidency a Provincial loan was floated and H. E. the Governor made a special appeal for contributions to the Bombay millowners, in view of their vital interest in the problem of the housing of the labouring classes of which their operatives form the largest number. The response was very prompt and handsome, the millowners subscribing about 4 crores out of a flotation of 9 crores of rupees.

Unfortunately the chawls erected by Government have not been taken up to any appreciable extent and their unpopularity has resulted in overcrowding in the mill chawls, but the position in this respect may improve now that the rents have been reduced in the Government tenements. The Bombay Millowners' Association is of the opinion that efficiency might be improved if the operatives could be taught to appreciate the improved accommodation now available in Bombay, but owing to illiteracy and the transitory nature of their work in the mills, any improvement is bound to be slow. The return on capital invested in the mill chawls is merely nominal and is generally in the neighbourhood of 1 per cent. to 1½ per cent., though in some cases it is even less than this.

At the present time, the Bombay mills are not developing the practice of housing their workmen for the reason that the solution of the housing problem has been undertaken by Government and a contribution of Rs. 10 to Rs. 12 lakhs per annum is paid by the mills towards the scheme.

In regard to the Government chawls for the workpeople, the social workers of the Young Men's Christian Association, who have personal knowledge of the housing conditions of the labouring classes, point out that the chawls are far from attractive. With the absence of a verandah, the difficulty of privacy, the absence of running water in the rooms, the necessity of doing all the house work in the same room as sleeping, eating, receiving visitors and the consequent smoke and congestion there is no wonder that the chawls are difficult to fill. Not accustomed to paying rent and not desiring to spend any more money than they have to in the city, that they may have more to take back with them to the village, the mill operatives take every opportunity to evade the rent collector. They have been known even to escape rent by getting into arrears and then going to the superintendent of the chawls and asking for another room under another name. Then they move their belongings secretly to their new room, and the rent collector, suspicious but not sure, contents himself with getting them to pay the rent for the new room.

Conditions in some of the Mill chawls are however different as in the case of the roomy and well-ventilated residential quarters built for the workpeople of the Colaba Land Mills.



[Photo Copyright.

A SET OF SEA-SIDE CHAWLS BY THE COLABA LAND MILLS FOR THE WORKPEOPLE.

Buildings for Mill Operatives in Bombay.

The following list gives the particulars regarding Housing Accommodation provided by certain members of the Bombay Millowners' Association for their operatives :—

Name of Mill.	No. of Operatives employed.	No. of Rooms provided.	Rent charged per room.
Khatau Makanji	2,904	26	2 @ Rs. 10-5 each. 2 ,, ,, 7-8 ,, 22 ,, ,, 5-0 ,,
Assur Veerjee	1,986	148	Rs. 6-0 ,,
Jacob Sassoon	5,413	190	,, 4-8 ,,
Meyer Sassoon	2,361	36	16 @ ,, 3-13 each. 13 ,, ,, 9-6 ,, 7 ,, ,, 4-12 ,,
David Mills	3,819	255	221 ,, ,, 7 ,, 34 ,, ,, 8 ,,
Kohinoor Mills	3,220	801 including 20 shops.	*Single Rooms.* Rs. 7-8 Ground Floor. ,, 8-8 First ,, ,, 9-8 Second ,, *Double Rooms.* Rs. 13-0 Ground Floor. ,, 14-8 First ,, ,, 15-0 Second ,, *Shops.* Rs. 20 Ground Floor. ,, 50 ,, ,,
Manockjee Petit	4,800	400	,, 3-5 average (varying from Rs. 2½ to Rs. 5)
Dinshaw Petit	2,500	(New) 98 (Old) 56	Rs. 5 for New. ,, 2 for Old.
Bomanji Petit	2,250	157	97 @ Rs. 2-8 each. 20 ,, ,, 3-0 ,, 40 ,, ,, 2-12 ,,
Century Mills	5,880	456	360 ,, ,, 5 each. 96 ,, ,, 7 ,,
Svadeshi Mills	3,299	564 single 110 double	Rs. 3 to 3-12 for single and Rs. 5-8 for double.
Textile Mills	3,396	216	Rs. 2-8.
Spring Mills	5,353	648	,, 5.
Dye Works	467	125	,, 2.
Madhowji Dharamsi	2,600	121	Rs. 4-8 to Rs. 5-8.
Colaba Land	1,517	410	Rs. 4 to Rs. 6
Jehangir Wadia	518		
Total	52,283	4,817	

N.B.—Excepting some of the Kohinoor Mill rooms all others have been almost wholly occupied.

Welfare Work and Medical Relief.

A good deal of work is apparent to improve the material position of the millhand. At the same time, if he is to be made happy and a useful member of society, the attempt at his moral elevation is equally important. In fact, unless he knows how to utilise his money properly, the net result of his better earnings from industrial life will not be beneficial to himself and his family. The educational work undertaken by the millowners for the workpeople and the housing accommodation provided for them have resulted in their general improvement while welfare work and medical relief are provided for more than 50,000 of the employees of the mills under the agency of Messrs. Tata Sons, Ltd., Currimbhoy Ebrahim & Sons, Ltd., E. D. Sassoon & Co., Ltd., and Nowrosji Wadia & Sons. This has been augmented by the social service and welfare work done by the Young Men's Christian Association among the labouring classes in the northern part of the city.

The Social Service League has also established a Technical School, equipped with machinery supplied free by the mills, wherein mill operatives are given practical instruction in spinning, weaving, etc.

The Nowrosjee Wadia Maternity Hospital which has been endowed by Sir N. N. Wadia, K.B.E., C.I.E., has materially helped towards the well-being of the female operatives and their off-springs and mill life in Bombay is not only bringing higher wages for the employees but free medical relief and other comforts which the labouring classes outside of the cotton factories do not enjoy.

Welfare Work by the Social Service League.

Reference has been made on page 485 to the good work done by the Social Service League in the interest of the cotton mill operatives in Bombay since 1913 when a night school was opened at Tardeo. This was followed in 1914 by social service which was also extended to the Morarji Mill chawls at Parel. The work consisted of night and Sunday classes, lectures, open air games, Co-operative Credit Societies and sanitation work. The work at Tardeo was undertaken for the employees of the Maneckji Petit Mills whose manager, Mr. C. D. Panday, provided the class-rooms free of charge. The League also received annual contributions from the Manekji Petit Mills and the Morarji Goculdas Mills towards the maintenance of the classes.

The co-operation of the League in connection with the Currimbhoy Ebrahim Workmen's Institute and the Tata Sons Workmen's Institute was enlisted in the year 1918. The Currimbhoy Institute had been endowed by Messrs. Currimbhoy Ebrahim and Sons, Ltd., and was intended mainly for the workpeople of the Currimbhoy, the Pabaney, the Crescent, the Fazulbhoy and the Pearl Mills and the Indian Bleaching, Dyeing and Printing Works. The Tata Sons Workmen's Institute was started by the League in November 1918 for conducting social work for the educational, economic and moral well-being of the employees of the Tata Mills and the David, Standard and Swadeshi Mills.

However in August 1924 the Tata Sons Institute and the Currimbhoy Institute, were handed over to the Agents of the respective groups of mills, as they desired to run them under their own management and supervision. Similarly the welfare work at the Morarji Gokuldas Mill chawl at Parel and the Maneckji Petit Mill rooms at Tardeo was also handed over to the Mill Agents themselves.

THE KAMGAR HITAWARDHAK SABHA (*See* page 485).

An influential gathering of Bombay citizens held on August 23rd, 1915, under the auspices of the Sabha with H. E. Lord Willingdon, Governor of Bombay, as President.

Welfare Work at Messrs. Tata's Mills.

So far as Messrs. Tata Sons were concerned, free medical help, quarters at cheap rates, supply of grain, etc., below cost price were given to their employees long before the Social Service League undertook welfare fare at the Mills under their Agency.

The welfare work for the operatives of the Svadeshi, Tata, and Standard Mills included Co-operative Credit Societies, Co-operative Stores, Cheap Grain Shops, Free Reading Rooms and Libraries, Night Schools, Half-timers' Day Schools, Medical Relief, Fresh Air Excursions and Sports, Temperance Propaganda, Créche for the children of women operatives, and other comforts, and since the beginning of 1921 the following additional schemes have been brought into force at all the mills under Messrs. Tata's Agency :—

Maternity Allowance.—Every woman who has put in a service of at least 11 months, receives two months' wages gratis at the time of confinement (either one month before or one month after confinement, or any other arrangement suitable to individuals). The woman claiming the allowance has to give an undertaking not to work anywhere during the period.

Sick Benefit Fund.—Every member of the fund contributes 8 annas per month. In the case of sickness, certified by the Mill Doctor, the member is paid an allowance at the rate of Rs. 25 per month for six weeks, and at the rate of Rs. 15 per month for a further period of 8 weeks if the sickness is prolonged.

Compensation in case of Accidents.—In the case of a worker dying as a result of an accident while at work, a compensation to the extent of Rs. 1,000 maximum, with a minimum of Rs. 300, was payable to the heirs of the deceased. In the case of an accident incapacitating a man from work owing to loss of limb or other cause, it has always been the practice to give such workman light nominal work with suitable wages. Of course, now the compensation is payable according to the Workmen's Compensation Act which has come into force since July 1924.

Savings Bank.—In addition to the above schemes, a Savings Bank has been started at the Svadeshi Mills by way of experiment. The smallest sum that an operative can deposit with the bank is 4 annas in the case of ordinary deposits and Rs. 50 in the case of deposits fixed for a period of six months or over. Interest is allowed at the rate of 4 and 6½ per cent. per annum on ordinary and fixed deposits respectively.

Works Committee.—At the end of 1920 a Works Committee was instituted at the Tata Mills with the object of fostering a spirit of co-operation between the operatives and the managing staff and officers and bringing to light the grievances and wants of the operatives. Each department of the mills was represented on the Committee by four members—two appointed by the Manager to represent the officers, and one jobber or mukadam and one workman elected every year by the Workmen's Departmental Committees to represent the operatives. The Manager of the Mills was Chairman of the Joint Committee. The Committee was an advisory body only, the final decision resting with the Manager, and questions which affected the interests of the millowners as a body on the one hand and the operatives on the other, *e.g.*, increase in wages, were not allowed to be discussed. Improvements in welfare activities, better conditions of work from sanitary and hygienic points of view, prevention of accidents, holidays, causes of individual hardship, etc., were among the subjects which could be brought before the Committee.

ANNUAL CONFERENCE OF THE CO-OPERATIVE CREDIT SOCIETIES OF THE CRESCENT MILLS CENTRE.

Seated on chairs from the left:—Mrs. A. Pradhan, Creche Supervisor; Mrs. R. Jacob, Teacher, Mrs. B. Rode, Teacher; Mrs. Sitabai Bhagwat, Secretary, C. E. Women Workers' Association; Mr. Rahim Mahomed, Clerk; Mr. Mahomedbhoy Ladha, Cashier; Mr. G. G. Bhosekar, Supervisor, Crescent Mills centr; Mr. V. D. Karkhanis, Auditor, Welfare Work; Mr. S. B. Kulkarni, Superintendent of the Institute; Mr. H. M. Colah, Superintendent, C. E. Mills, and President of the Conference; Mr. K. L. Ashrani, Manager, Crescent Mills, and Chairman of the Reception Committee; Mr. A. Smith, Weaving Master; Mr. Gulamalibhoy Salemahomed, Acting Manager; Mr. F. Boyd, Spinning and Carding Master; Mr. Mahomedbhoy Kassum, Manager, Imperial Mills; Mr. Sorabji, Spinning Master; Mr. Hormasji, Sizing Master; and Mr. Abdullabhoy Ahamed, Head Clerk.

The Currimbhoy Ebrahim Workmen's Institute.

This is the largest organisation of welfare work for the mill operatives in Bombay extending as it does to eight of the factories under the agency of Messrs. Currimbhoy Ebrahim & Sons, Ltd. The Institute owesits origin to a suggestion from Sir Fazulbhoy Currimbhoy that his firm should be instrumental in looking after the comfort and well-being of the thousands of workpeople under their management and thereby advance their social and domestic welfare. Lady Willingdon opened the Institute on March 15th 1918, from which date it has not only been managed successfully by the Superintendent and staff of the various mills but its scope has been considerably enlarged and its utility kept up even under the trying conditions of labour unrest, strike and other vagaries peculiar to the workpeople and their associates.

The total strength of the Institute's regular membership stands at over 3,200. Roughly stated about 700 persons take advantage of the educational work, 1,700 of economic work, 400 of the recreational, 200 of the maternity and child welfare activities and 500 of the Works Committees. Besides these a large number avail themselves of the cloth-shop, medical help, reading rooms, writing of applications, theatricals, sports and excursions and general gatherings and meetings.

Co-operative work forms the largest of the eight departments of the Institute and this work is as important as it is difficult to manage. A system of regular monthly deposits has been introduced as also that of giving loans proportionate to the amount of savings. The Secretaries' training class was opened at the hands of Mr. A. C. Desai, L.Ag., M.A., Assistant Registrar of Co-operative Societies, Bombay. As to the Co-operative Stores the Committee appointed by the Supervising Board of the Institute for improving its working, made useful suggestions which were adopted with the result that the membership has increased, as also the monthly sales by more than four times and the stores could contribute bonus to purchasing members on the amount of their sales.

The Women Workers' (Co-operative) Buying Club recently started with a special department of sewing has, within a short time, become popular among the women and promises to work with even a still greater amount of success.

The Association of the Women Workers of the Currimbhoy Ebrahim Mills started in July 1921 is probably the first systematic attempt in India to interest the mill-women in educational, co-operative and maternity and child welfare work. Besides two primary education schools and three co-operative credit societies, the Association has added to its work a fourth society and a third school and a (Co-operative) Buying Club.

Educational Work.

The total number of students in all the schools and the classes was 253 on the roll with 148 as the average attendance. Two Anglo-Vernacular Schools for the convenience of whole-time workers have been working, one at the main centre and the other at the Crescent, for giving instruction to students upto the third standard. The Adult Education Class was started in December 1925, mainly at the desire of some workers of the Crescent Mills, and is held during the recess hour. The primary object of the class is to teach the students to read and write both English and Marathi. Three Primary Education Classes for women workers at the Pabaney, Pearl and Premier Mills were held in the departments of the respective mills during recess hours and the last one was started in March 1925.

SECRETARIES OF TRAINING CLASS: CO-OPERATIVE CREDIT SOCIETIES.
(CRESCENT MILL CENTRE.)

Fifth from left:—Mr. N. D. Kadam, Inspector, C. Societies, C. E. Mills; Mrs. Bhagwat, Secretary, C. E. Women Workers' Association; Mrs. Rode, Teacher, Women Workers' School; Mr. C. S. Deole, Member of the Servants of India Society, and Mr. S. B. Kulkarni, Superintendent of the Institute.

CRECHE AT THE FAZULBHOY MILLS.

Right—Mrs. S. Bhagwat, Secretary, C. E. Women Workers' Association. *Left*—Mrs. A. Pradhan, Creche Supervisor.

The Kindergarten Class at the creche is meant for the comparatively older children at the crèche. Instruction is given to them in short stories, and also knowledge of the names of different animals and flowers. Sewing and Knitting Classes are attached to the women's classes and clothes of daily wear are made. Drawing and Music Classes have been held at the main centre for the students of the Halftimers' School and instruction in free hand design, brush and pencil work, paper folding, clay modelling, etc., was given to them. A music class was also attached to the day schools.

The Clubs for boys have been working with the object of encouraging them to manage their own activities such as occasional meetings, debates, games, savings fund, cricket club, excursion and so on in a systematic manner. A Debating Society is one of the activities of the Boys' Educational Association. The whole programme is conducted by the boys themselves under the supervision of their teachers. There are three reading rooms and four libraries and a library for the women workers at the office of the Association.

Economic Work and Loans.

There are 31 Co-operative Credit Societies, with over 1,300 members, working with the object of giving loans to needy workers at a reasonable rate of interest and creating among them the habit of thrift. Workmen have generally little credit in Bombay at least, and consequently the Marwaris or Pathans, whom they have to approach for getting advances in times of need usually charge interest at from Rs. 75 to 300 per cent. The Inspectors of the Institute found out a number of cases of illiterate workmen who were made by these Marwaris to sign bonds for twice the amount actually paid, the system of accounts maintained by these usurers being most detrimental to the ignorant workers. But they do need loans and in the absence of any proper provision they have to submit themselves to the blood-sucking methods of these usurers. It is here that the usefulness of Co-operative Societies for workmen can be adequately seen. The Institute also helps the societies by advancing deposits whenever required up to four times the amount of their share capital.

The Women Workers' (Co-operative) Buying Club was started in August 1925 on co-operative lines with the object of supplying, especially to women workers, necessaries such as saris, cholies, soap, tea, sugar, etc. Sewing work is also done side by side. The Workers' Sewing Class was started in 1925 with the idea of arranging for instruction to the workers in sewing and sewing the clothes of mill workers at concession rates. The net profit will be distributed to the workers doing the tailoring work and to the members in a certain proportion. The class in respect of instruction is open both to members and non-members with a difference in the amount of fees charged.

The Institute intends to help the Society by way of advancing deposits, machines, etc. The services of an expert in sewing have been secured for giving instruction to students. Arrangements are made at the Co-operative Stores for selling to the workers at low rates.

Recreational Work.

A Gymnasium is located in a spacious shed in the compound of the Institute and is equipped with the requirements of Indian exercises. A Social Club has been started for selling tea and refreshments of good quality at reasonable rates for the workers. In all 8,300 workers took advantage of the arrangement and the sales came to Rs. 3,500 in a year. Open air sports, excursions to outside places of interest and theatrical performances are arranged from time to time.

The Creche.

The Crèche was started in 1919 and was probably a novel attempt in the work of child welfare in Bombay. The number of babies has gone to above 70, *i.e.*, a little more than the crèche building can conveniently accommodate. An arrangement of warm-water bath to the babies has been made and the number of clothes per child was increased. The ground floor is extended in order to enable the comparatively older children to freely play about and a compound for the open space and a small garden round it will be soon taken up. The food of the babies is milk and it is given as much as required. Children who take rice, bread, etc., brought by their mothers are given biscuits and milk twice. Sick children are given prompt treatment by a qualified doctor. Activities in connection with the crèche are the Kindergarten class and the gatherings of the mothers for explaining to them the importance of several points about bringing up their babies and general cleanliness.

Works Committees.

Works Committees for the workers of the eight Currimbhoy Ebrahim Mills were started by the Institute in 1920 and have been working since then with the object of providing a common ground for the representatives of Workers and the Management to come together, to understand their mutual views and difficulties, if any, and thus to establish and develop a spirit of co-operation between them. This work has been sympathetically encouraged by the Mill Agents by sanctioning several very important proposals such as compensation in cases of accidents, provident fund, sick benefit fund, maternity benefit and so on.

Currimbhoy Ebrahim Women Workers' Association.

Four Co-operative Societies, three schools, one library, sewing and knitting classes, moral classes, and periodical meetings and gatherings have been the activities of this Association which is conducted only for women workers. The Institute has been also able to inaugurate for women the maternity benefit scheme, *i.e.*, full pay leave one month before and one month after delivery.

Medical Relief.

Dispensaries had been started in all the Currimbhoy Ebrahim Mills with part-time doctors and medical relief was given to the workers who attended them. But the real necessity of such relief was felt by those workers who were absent from work owing to illness. The Institute therefore arranged with the Agents in 1919 to appoint a whole-time doctor for this work and took upon itself the task of finding out the chawls of the sick workers by appointing a special man for the purpose and to make the work of the visiting doctor more useful as he can now attend to about 2,000 cases in a year.

The Principal Workers.

The heavy and responsible work to which we have referred is being looked after by the Superintendent and Staff of the Institute, chief among them being Mr. H. M. Colah, Mr. F. Stott, Mr. Abdullahhoy Currim, Mr. Mahomedbhoy Kassim and Mr. Wadia. Among the other workers are Mrs. Sitabai Bhagavat, Secretary of the Association of the Women Workers, Mr. S. B. Kulkarni, Superintendent of the Institute, and Messrs. N. D. Kadam and D. N. Surne, Inspectors of the Co-operative Societies of the Institute. Mr. V. D. Karkhonis, B.A., Government Auditor, Co-operative Societies Welfare Work, has also rendered great help while Mr. S. G. Almonia, Government Industrial Organizer, gave valuable assistance in 1914 in reviving the Co-operative Stores of the Institute.

Welfare Work by Messrs. Nowrosjee Wadia & Sons.

That the workpeople can appreciate the sympathy of their masters and be grateful for them is seen by the good feeling that has prevailed between the employers and the employed, even during a period of general disorder. Among the mill agents who have been actively and personally concerned in the welfare of their employees, the name of Sir N. N. Wadia, K.B.E., C.I.E., has been familiar to those engaged in the mill industry. Brought up from his youth as a practical worker in a cotton mill, Sir Nusserwanji has not spared time, labour or money in looking after the comfort and welfare of the millhands of Bombay. The provision made by him for the medical relief of the workpeople has been exceptionally liberal and well organised.

The Spring Mill, the Textile Mill, and the Dyeworks, have each a dispensary of its own, with a sub-assistant surgeon in charge of each dispensary, who are all under the supervision of a qualified medical man who also attends to the patients at the different mills. The annual expenditure of the Bombay Dyeing & Manufacturing Company under this head averages Rs. 35,000 per year, including medicine. The Company has also started a crèche at the Spring Mills where the women workers leave their infants while attending to the machines, the crèche being in charge of a fully qualified trained nurse and an *ayah*. Milk and biscuits are supplied free of charge for the little ones, and the experiment so far has proved successful at a cost of Rs. 2,000 to the Company which also supplies at the three mills all the immediate necessities of life, *viz.*, grain and other food supplies, firewood and cloth, at wholesale prices.

The Nowrosjee Wadia Maternity Hospital.

But equally important, if not more, has been the good work done by Sir Nusserwanji Wadia for the comfort and medical relief of the women workers, not only in the mills under his agency but also for the benefit of the general body of women who are residing in the Parel district.

At the Nowrosjee Wadia Maternity Hospital which Sir Nusserwanji started in 1922 the women have been carefully looked after in the out-patient department by the House Surgeon before admission and regularly attended to for medicine up to the confinement day. They fully appreciate the benefit of this kind of ante-natal care, and a good many of them have passed through the critical period of confinement with ease and comfort, whilst they had looked upon their former deliveries with fear and dread.

It should be noted that the institution was generously financed personally by Sir Nusserwanji, the cost being Rs. 45,550 for 1924 and Rs. 48,340 for 1925.

The hospital was originally started with six beds in a hired flat on the top floor of a building at Parel, but within six months it was found to be inadequate, and was moved to "Vasant" Building at Suparibaugh Road. Here it had three floors and accommodation for 30 beds, the total number of admissions during 1925 being 1,272 including 979 cases of confinement of which 462 or 47 per cent were cotton mill workers.

Born 1849. Died 1899.

THE HON. MR. N. N. WADIA, C.I.E.

The New Building for the Nowrosjee Wadia Maternity Hospital.

But the good and sympathetic work done by the medical and nursing staff of the hospital increased its popularity and the female operatives of the cotton mills came in by the hundreds to take advantage of the care and skill with which the ante-natal and confinement cases were treated. The continuous and increasing requests for admission and the apparent saving of life among the mothers and infants encouraged Sir N. N. Wadia to enlarge the scope and usefulness of the institution by the munificent donation of Rs. 16 lakhs for a larger building with better accommodation and up-to-date equipment. The foundation-stone of the new hospital was laid by His Excellency Sir Leslie Orme Wilson, P.C., G.C.I.E., C.M.G., D.S.O., Governor of Bombay, on June 9th, 1925, at Parel, in the centre of the mill district and in the vicinity of the residential quarters of the factory workers. The designs for the hospital and the nursing quarters were prepared by the late Mr. George Wittet, F.R.I.B.A., and the whole structure together with the furniture and appliances was ready with every maternity comfort on December 13th, 1926, well within the estimate prepared by the donor. The occasion was again marked by the presence of Sir Leslie Wilson who performed the opening ceremony before a large and representative gathering of Bombay citizens. The new building has been provided with the most modern appliances and apparatus, the general design and equipment of the wards affording the highest efficiency in the treatment of maternity cases.

The Cost and Maintenance Charges.

As regards the cost of the scheme, Rs. 3 lakhs have been spent on the land, Rs. 13 lakhs on the building and furniture, or a total of Rs. 16 lakhs of which Rs. 6 lakhs were contributed by Sir N. N. Wadia and his mother Bai Jerbai Nowrosjee Wadia, in addition to Rs. 10 lakhs which they gave as an endowment fund the interest from which will be utilised towards the maintenance charges which will be supplemented by contributions from the Bombay Municipality and Government. The respective share of the Municipality and Government towards the cost of the building has been Rs. 4½ to Rs. 5 lakhs including the land which measures 20,000 square yards. The annual running expenses of the hospital are estimated at Rs. 1,30,000 of which Rs. 60,000 will be provided from the interest on the Wadia endowment fund of Rs. 10 lakhs.

The Board of Management.

The control of the hospital will be vested in a Board of Management which will consist of two representatives of Government, two of the Municipality, two from the Millowners' Association and three members from the firm of Messrs. Nowrosjee Wadia & Sons. The Board will be independent of any other institution in Bombay and will have full and absolute control over the affairs and management of the hospital.

Speech by His Excellency Sir Leslie Wilson.

As Governor of Bombay Sir Leslie Wilson has taken an active interest in the provision of medical relief and increased hospital accommodation for the inhabitants of this city, and in opening the Nowrosjee Wadia Maternity Hospital he made an appreciative reference to the good work so far done by the medical staff and nurses of the temporary hospital and the increased benefit which the factory operatives would receive in the extended and well-equipped wards of the new building which he had opened. In a speech that was full of warmth and sincerity His Excellency said:—

"The building which I am about to open this afternoon adds one more to the long list of institutions of a charitable and philanthropic character which have been erected in Bombay through the munificent generosity of members of the Parsi community.

"Only a few days ago I laid the foundation-stone of the Byramjee Jeejeebhoy Hospital for Children. I referred on that occasion to the urgent necessity for a children's hospital in Bombay, and I can safely say that the urgent necessity for a maternity hospital in Bombay has become no less acute. The account given by Sir N. N. Wadia of the work which has already been done by him in this direction proves very completely, if proof were needed, the necessity for such a hospital, especially among the millhands of Bombay. It cannot, of course, be supposed that a single hospital of 120 beds will provide, at all adequately, for the necessities of these classes, but it is a very substantial beginning in the right direction. I have no doubt that, in future, many more such hospitals will be established in Bombay, and I sincerely hope that they will be established; but the credit of being the pioneer in this most important movement for the welfare of the masses will go down, for all time, to Sir N. N. Wadia and those gentlemen who have co-operated with him, particularly Colonel Glen Liston, Dr. Row, and Dr. Mangaldas Mehta.

Welfare of the Workpeople.

"It was the practice in industrial areas in England in the olden days, to leave the workers to look after themselves, and the inevitable result of this was that they suffered in health and physique, and their work was bound to be inefficient, with a consequent heavy loss to the industries concerned. It has been discovered that the proper care of the working classes, quite apart from any question of humanity, is in the long run a paying proposition, and I would appeal to all employers of labour in Bombay who can see their way to do it, to follow to the best of their ability the excellent example of Sir N. N. Wadia, as I am convinced that all efforts made in this direction will be of lasting benefit to the people of Bombay, besides being a sure source of profit to the industries which are being carried on in this great city.

"There is one very important fact that distinguishes this hospital from so many others which have been established in Bombay, and that is that the donor has provided not only a very substantial share of the cost of the building, but a most generous endowment fund, which will go a long way towards the cost of maintaining the hospital in an efficient state. I need hardly say that this is an important new departure, which I very warmly welcome, and I would highly commend the foresight of Sir N. N. Wadia in providing this munificent endowment fund.

"The record of the temporary hospital to which Sir N. N. Wadia, Dr. Mehta Dr. Desai and Sister Magee have devoted so much time and care proves, beyond doubt, that there is a great change of feeling among the poorer classes, and that they are rapidly becoming willing to accept skilled assistance when available.

"To-day is to you, Sir Ness, a day of remembrance, being the 27th anniversary of the death of your father. This hospital is to be named after that great-hearted and philanthropic gentleman, and I can imagine no institution more suitable to commemorate his memory than this maternity hospital which will be the means of saving many thousands of lives in the future, and of alleviating the pain and suffering of women."

A Unique Donation.

With these words His Excellency declared open the Nowrosjee Wadia Maternity Hospital which inaugurated a new departure in the allotment of benevolence, as the donation of Sir N. N. Wadia is mainly intended for the health and efficiency of the women and children who toil day after day in the cotton mills and contribute towards the profits of the shareholders and mill agents. It is an appropriate benefaction in the memory of his father, the late Mr. Nowrosjee Nusserwanji Wadia, C.I.E., whose name has been intimately associated with the rise and progress of the mill industry and the advancement of technical education for the youths of this country. No better use could have been made of Sir Nusserwanji Wadia's endowment, the magnitude of which not only beats all past records in medical relief for women factory workers and their offsprings but carries with it the unique distinction that the donation is from the self-acquired wealth of a practical worker and not the surplus of ancestral property or inherited fortune.

The Medical and Surgical Staff.

While the Nowrosjee Wadia Maternity Hospital has been equipped with the most modern appliances and fittings the highest talent in medicine and surgery has also been requisitioned for the treatment of maternity cases. Among the honorary workers Dr. M. V. Mehta, F.R.C.P.I., has been the life and soul of the hospital as its senior Medical Officer. Not only has Dr. Mehta's services been useful in the treatment of the cases, but his influence among the jobbers and female supervisors and his tact and patience have been invaluable in removing the prejudice of the ignorant classes against hospital treatment.

The paid staff including the nurses and attendants have also been carefully selected and the general management of the hospital has been placed under experienced and qualified supervision.

A New Era for Women Workers in Factories.

With an up-to-date and spacious hospital and a staff of eminent physicians and surgeons, a new era has been opened for the women workers in the cotton mills of Bombay who will not only be getting higher wages compared with other female labourers, but the comforts of welfare work, creches, and above all a well-equipped hospital and skilled treatment during the most critical periods of their lives. Institutions like the Nowrosjee Wadia Maternity Hospital and the munificence of donations such as Sir N. N. Wadia has contributed should tend to increase the bond of peaceful relations between capital and labour and the efficiency of the operatives engaged in the premier industry of India.

The E. D. Sassoon Welfare Institute.

Welfare Work is carried on in all the mills under the Agency of Messrs. E. D. Sassoon & Co., Ltd., including the Co-operative Societies. The total number of these Societies increased from 17 to 19, and the new societies include a Women's Society. The membership increased from 1,337 to 1,882, and the paid-up share capital increased from Rs. 31,650 to Rs. 40,000 and the working capital from Rs. 57,710 to Rs. 64,110.

The workpeople are beginning to take a keen interest in the working of the Societies, and the International Co-operator's Day was celebrated in July 1926 on a grand scale with processions starting from the various mills under the E. D. Sassoon Agency and converging into the Jacob Sassoon Mill compound with music, devotional songs and dancing, and ending with light refreshments and discourses on Co-operation. A Co-operative Conference was held in September 1926 under the presidentship of Sir Victor Sassoon, Bart., at which nearly 1 000 members were present and various resolutions relating to the co-operative movement in the mills were passed.

The night school in the Jacob Sassoon Mill gives instruction in English, Marathi and arithmetic and has 3 English classes, 4 Marathi and 1 infant standard. The library in the same mill contains 449 volumes out of which 408 are Marathi and 41 English. The reading room subscribes to daily papers and monthly periodicals. The restaurant in the Alexandra Mill has proved highly popular, while the boarding house in the same mill has nearly 30 boarders. A reading room with a library has also been started with about 150 volumes and half a dozen periodicals. A Sports Club too has been recently started in the same mill with nearly 40 members playing cricket and other games as a beginning.

A babies' créche was started in the Jacob Sassoon Mill in May 1926, and contains 15 cribs in charge of a qualified matron and two ayahs. The number of children on the roll is 23 and the average attendance is 16. The children are brought to the créche by their mothers when they come to work and are taken back when they go home in the evening. They are washed and given clean clothes when they are brought to the créche. The smaller babies who require breast-feeding are fed by the mothers twice or thrice a day. The grown-up children are given milk and biscuits in the morning and tea in the evening. A few mothers bring their own rice and *dal* to feed their grown-up children.

The names of the Members and Workers of the Welfare division are as under:—

MESSRS.

T. E. Harker, (*Chairman*).	W. Ridyard.	G. R. Pradhan.
C. J. Barrow.	B. A. Golatkar.	V. P. Mahatre.
P. N. Warde	A. C. Dambar.	V. S. Pednekar.
R. B. Thakore.	T. Spencer.	R. L. Chilap.
K. N. R. Ranina.	E. McPhail.	G. C. Abbott.
	V. P. Kamat.	V. M. Kande.

G. R. Tonse, *Secretary*.

Expert Advisers:—The Bombay Co-operative Institute.

Textile Technical Schools for Mill-Workers.

In the year 1918 the Social Service League, Bombay, formulated a scheme for the establishment of a Working Men's Institute with a view to providing a centre for activities for the spread of education among the working classes, for supplying facilities for their recreation and for giving them assistance in organizing themselves for their economic improvement by means of co-operation. With the generous help of several business concerns in Bombay the scheme materialized, and the Working Men's Institute was opened in February 1922 and is carrying on a number of activities for the well-being of the labouring classes.

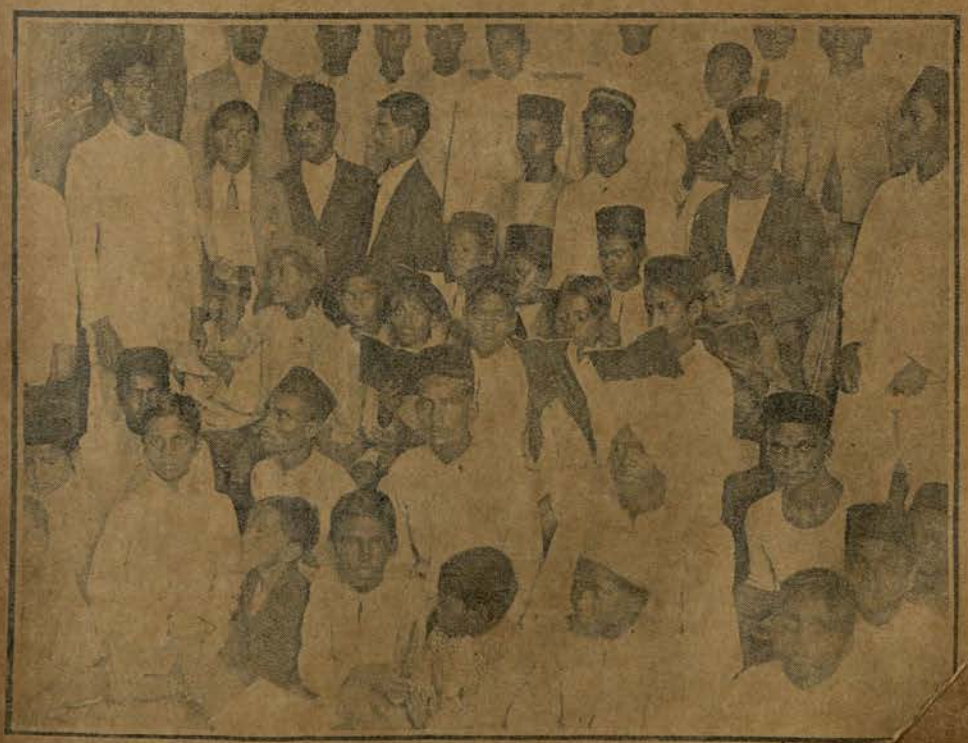
To start a technical school, for the training of mill workers, was a part of the scheme, and a sum of Rs. 35,000 was received from the Bombay Dyeing and Manufacturing Company, Limited, through their Agents, Messrs. Nowrosjee Wadia and Sons, specially for the school building, the construction of which was undertaken soon after the Institute was opened and it has been in use since 1924. Courses of instruction for the technical school were prepared by Mr. V. A. Fernandez of the Victoria Jubilee Technical Institute, and approved by a Committee consisting of Mr. H. F. Knight, Director of Industries; Mr. A. J. Turner, Principal, Victoria Jubilee Technical Institute; Mr. J. Hurst, of Messrs. E. D. Sassoon United Mills Co., Ltd.; Mr. J. B. Green, of Messrs. Currimbhoy Ebrahim and Sons and Mr. F. E. Bharucha, Assistant Director of Industries.

The scheme was worked out for eighty day and night students who were to be given elementary instruction, in theory and practice, in spinning and weaving in the vernacular language. The League could not, however, collect sufficient funds from the millowners to pay for the monthly scholarships for the day students and only the night classes could be started in August 1924. Sets of machines were presented by Messrs. Tata Sons, Messrs. Currimbhoy Ebrahim & Sons and the E. D. Sassoon United Mills Ltd.

At the beginning of 1925 the number of students on the roll was twenty and in July when the first year's course was completed the students were examined by the representatives of the Committee for the Direction of Technical Education in the Bombay Presidency. Seven out of nine pupils passed the examination, most of them with credit, and prizes were distributed among them by Mr. R. D. Bell, C.I.E., I.C.S. Mr. J. B. Green of Messrs. Currimbhoy Ebrahim & Sons, Ltd., and Mr. A. J. Turner, Principal of the Victoria Jubilee Technical Institute expressed their satisfaction at the work done by the Institute during the first year.

In addition to the donation of Rs.35,000 by Messrs. Nowrosjee Wadia & Sons for the school building, the Social Service League has received an annual grant of Rs. 1,500 from the Bombay Municipality and Rs. 1,420 from the Committee for the Direction of Technical Education. The League, however, points out that the millowners have not sufficiently realised the necessity for the provision of the training of mill workers. By providing funds the millowners can help the League in giving scholarships for the day students and encourage them to take advantage of the technical training given at the Institute.

SCHOOL FOR MAHOMEDANS: THE NIGHT CLASS.



TEACHERS AND PUPILS: NIGHT CLASS.
(*Except Urdu Class.*)

Welfare Work by the Young Men's Christian Association.

In the north end of the City, and in the neighbourhood of the cotton mills, the industrial workers are gathered in the largest numbers, living in one-room tenements, huddled and crowded, restless and careless. Many of them render their quarters smoky and almost unlivable, however hygienic they might have been at first. It is here that they spend their leisure time, when they should be recuperating for their daily toil.

It is to the work of educating and uplifting these village folk, overwhelmed with the strange demands of their city and mill life, that the Young Men's Christian Association of Bombay has recently directed its attention. Its mission is not confined to any group. Its field is the whole range of human activity during the 'off' hours of the workers. Its desire is to arrange for the proper utilization of the leisure hours of such people. To this end the Association has engaged the services of two secretaries, Mr. W. E. D. Ward from America and Mr. D. N. Tilak, a Marathi-speaking Indian graduate. They have enlisted, during the past few months, the services of over fifty volunteer workers, all Indians, chiefly from the students in Bombay, most of whom are non-Christians.

The programme of the Association also includes an institute with table and other games, reading room, library, entertainments, maternity and infant welfare, cinema shows, co-operative societies, temperance and thrift propaganda. For the women and girls, Mrs. Ward has been able to secure many volunteer workers in games for the small children, in sewing classes for the older girls and women, and in special attention to the health of mothers and children.

Social welfare work was begun by the Association in March 1925 at Naigaon and a small piece of land was leased from the Improvement Trust and in June 1926 a hut was built and equipped as a centre for the various forms of social welfare work. The Association's purpose is to render service without distinction of caste, creed or class, to the whole community during the "off hours" and it has in view the correlating of the great philanthropic resources of Bombay city for service to the mill workers' community.

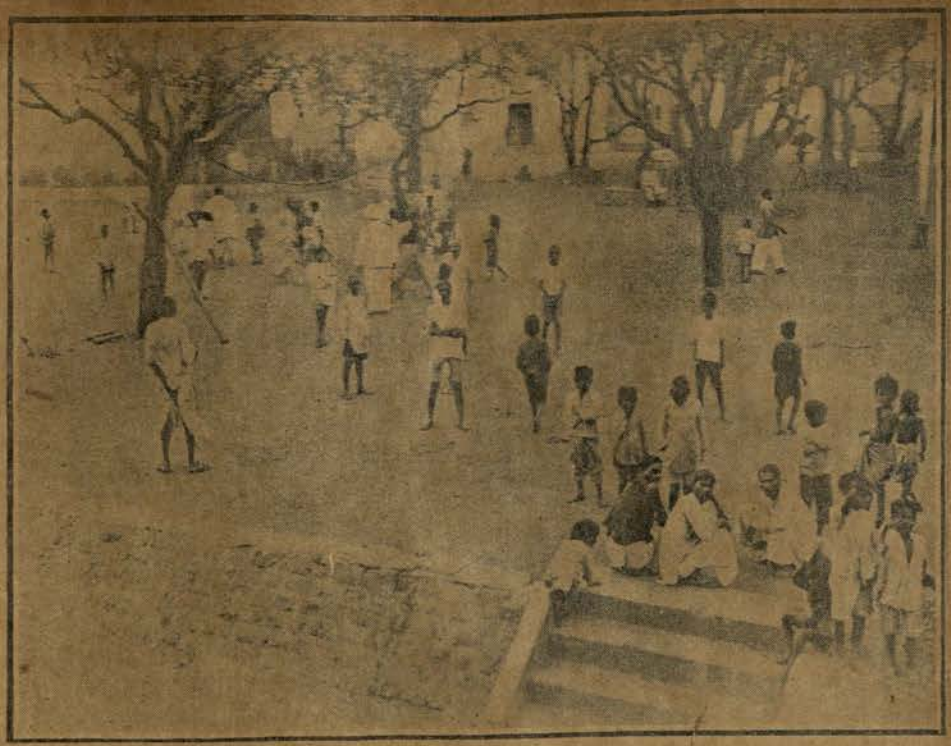
The night school has been a steady success from its beginning in April 1925, most of the students being working boys and men. Six classes have been formed, meeting five times a week: two for studying Marathi, two for English and Marathi, one for Gujerathi and English and one for Urdu and English. Only elementary subjects are taught.

The social service began by bringing all sorts of people together to play football, cricket and other games. Volunteers from the Wilson College and other places and ladies from cultured homes—Hindu, Parsee, Mahomedan, Christian—are aiding the play director in this activity among the children. A troop of Boy Scouts has been started with the help of a volunteer leader. Lantern lectures have been given occasionally with an attendance from 100 to 200 each evening. Entertainments by gramophone and by *bhajans* (sacred songs) have been held. Training for dramatic performance has been carried on, and a reading room has been started while indoor games are enjoyed each evening.

The Association proposes to start a carpentry class and some sort of combination of economic advantage and recreation during leisure hours, such as weaving, goat-keeping and poultry raising and any opportunity of service that will bring these people moral, physical or social benefits is welcomed and undertaken as the means of the Association permit.

THE PLAYGROUND ADJOINING THE MILL CHAWLS.

THE ELEMENTARY CLASS FOR YOUNG WORKERS.



THE PLAYGROUND: PLAYING WITH CAGE BALL.

A BAZAAR NEAR THE Y.M.C.A. WELFARE CENTRE.

Photos : Y.M.C.A.

The International Textile Workers' Delegation in Bombay.

THERE is an International Textile organisation in Europe with its branches in England, Germany, France and Italy, which looks after the organisation, welfare and promotion of economic and political interests of the textile workers, its principal activities being centralised in Lancashire and Berlin. It was from this organisation that a Special Delegation arrived in Bombay on December 19th, 1926, with their leader, the Rt. Hon. Thomas Shaw, and the following members:—Herr F. J. Furtwaenler; Mr. M. Brothers; Herr C. Scharder and Mr. James Hindles, Miss Shaw acting as Secretary.

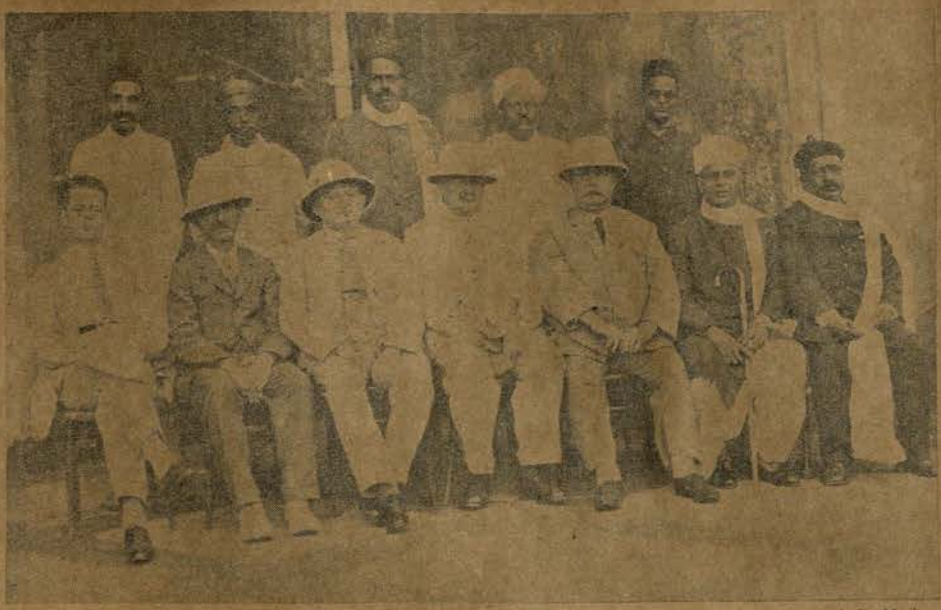
The Delegation was received by the members of the Bombay Provincial Committee of the All-India Trade Union Congress and the Servants of India Society and the Social Service League who took the visitors to the various centres of the mill industry and among factory workers. This was an appropriate arrangement as the Social Service League has rendered useful services to the mill operatives in Bombay and the Delegation were in a position to get information in regard to labour conditions in this city by direct contact with the labour leaders and factory workers. The Rt. Hon. Thomas Shaw and the other members of the Delegation also addressed a meeting of the labourers under the auspices of the Bombay Provincial Committee of the All-India Trade Union Congress.

The members of the Delegation pointed out that taking into account the fact that more than in every other trade in the world the conditions of the textile trade were governed by international conditions, the Textile Workers' International when it discussed its business found that it lacked the precise and definite information necessary to found a really solid opinion with regard to international conditions, particularly international competition. European conditions were very well known to them, but about the conditions in the Far East and in the southern States of America they were not quite so clear. "We knew the hours and we knew the wages," they continued, "but we did not know exactly what was done with the wages, how many machines were run and what the actual competitive factor was as between the different countries."

For that reason the Textile Workers' International decided to investigate on the spot the condition in the States of America, Japan, China and India. This is the first of the delegations and it concerns itself with the Indian situation generally in all the textile trades—jute, wool, silk and other materials, in addition to cotton. They conferred with the Bombay millowners, workers and well-informed members of the public, and visited the mills and the residential quarters of the mill workers to study their ways of life and conditions of living.

The Rt. Hon. Thomas Shaw said that textile workers all over the world formed one brotherhood. They did not know of any colour, caste or race. The textile labourers of India had as much right to fair wages and decent conditions of living as any of the world and that right could only be secured by organisation and self-help. People outside the textile industry could not do much for them. In this connection he cited the example of Great Britain where, he said, labour conditions a hundred years ago were worse than what they are in India now. Great Britain ameliorated her conditions through sheer force of organisation and self-sacrifice.

The delegation then left for other parts of the country, and will make the fullest inquiries possible and present a report before the next meeting of the International Committee at Stockholm in 1927 in reference to labour conditions in India.



[*Photo : I. D. Mail.*

THE INTERNATIONAL TEXTILE WORKERS DELEGATION IN BOMBAY.
Group Photograph with Labour Leaders and Social Workers.

Sitting, Left to Right :—Herr. F. J. Furtwaenler ; Mr. M. Brother ; Herr. C. Scharder ; The Rt. Hon'ble Mr. Tom Shaw ; Mr. James Hindles ; The Rt. Hon'ble Mr. Srinivasa Shastri ; Mr. C. K. Deodhar.
Standing, Left to Right :—Mr. K. J. Chitalia ; Mr. C. S. Deole ; Mr. N. M. Joshi ; Mr. A. V. Patwardhan ; Mr. R. R. Bakhale.

THE BOMBAY COTTON MILL WORKERS [*Special Photo.*
As seen by the International Textile Workers' Delegation.

Holidays for Bombay Cotton Mill Operatives.

The following Holidays are in accordance with the Indian Factories Act and while the dates will vary during each year the list will give a general idea of the closing days in Bombay cotton mills :—

Month.	Date of Holiday.	Day of Week.	Festival.	*Suggested Monthly Pay Date.	Day of Week.
1926.					
January	3rd	Sunday.		12th ..	Tuesday.
	13th	Wednesday ..	.. *Magar Sankrant.*		
	14th	Thursday ..	.. *Solar Eclipse.*		
	24th & 31st	Sundays.			
February	7th	Sunday.		10th ..	Wednesday.
	11th	Thursday ..	.. *Maha Shivratri.*		
	21st & 28th	Sundays.			
March	1st	Monday ..	.. } *Holi.*	13th ..	Saturday.
	2nd	Tuesday ..	.. }		
	7th	Sunday.			
	15th	Monday ..	.. *Gudi Padwa.*		
	21st & 28th	Sundays.			
April	4th & 11th	Sundays.		10th ..	Saturday.
	21st	Wednesday ..	.. *Ram Navmi.*		
	25th	Sunday.			
May	2nd, 9th, 16th, 23rd and 30th	Sundays.		15th ..	Saturday.
June	6th, 13th, 20th and 27th	Sundays.		12th ..	Saturday.
July	4th & 11th	Sundays.		10th ..	Saturday.
	21st	Wednesday ..	.. *Ashadi Ekadashi.*		
	25th	Sunday.			
August	1st & 8th	Sundays.		12th ..	Thursday.
	13th	Friday ..	.. *Nag Panchami.*		
	23rd	Monday ..	.. *Narli Purnima.*		
	31st	Tuesday ..	.. *Gocul Ashtami.*		
September	5th	Sunday.		10th ..	Friday.
	11th	Saturday ..	.. *Ganesh Chaturthi.*		
	15th	Wednesday ..	.. *Gouri Visarjan.*		
	20th	Monday ..	.. *Anant Chaturdashi.*		
	26th	Sunday.			
October	6th	Wednesday ..	.. *Sarva Pitra Amvasa.*	15th ..	Friday.
	10th	Sunday.			
	16th	Saturday ..	.. *Dasera.*		
	24th & 31st	Sundays.			
November	5th	Friday ..	.. } *Diwali.*	13th ..	Saturday.
	6th	Saturday ..	.. }		
	7th, 14th, 21st and 28th	Sundays.			
December	5th, 12th, 19th and 26th	Sundays.		11th ..	Saturday.

Note.—The dates shown in column 5 are recommended by the Committee of the Bombay Millowners' Association as Pay-days for general adoption by members of the Association.

(*Left*) The Female Supervisor or "Naikin" and Women Reelers.

The Head Jobber.

[Special Photos.

The Weavers and Piecer Boys.

BOMBAY MILL OPERATIVES IN THEIR HOLIDAY ATTIRE.

A GROUP OF REPRESENTATIVE MEMBERS OF THE BOMBAY CHAMBER OF COMMERCE, 1927. *(Photo: Indian Daily Mail.*

(left to right:—Mr. G. L. Winterbotham; Mr. L. F. Tucker; Sir Leslie Hudson, Kt.; Sir Ernest Jackson, Kt. C.I.E.; Sir Joseph A. Kay, Kt., Mr. J. R. Abercrombie; England; Mr. E. Miles and Mr. R. Sullivan (Secretary).

The Bombay Chamber of Commerce.

THE Bombay Chamber of Commerce was established as far back as 1836 under the auspices of Sir Robert Grant who was then Governor of Bombay. Mr. John Skinner, of the firm of Messrs. Skinner & Co., was the principal founder of the Chamber and its most active worker. In 1875 the Chamber of Commerce took under its wing the newly-established Bombay Millowners' Association and it also undertook the secretarial work of both institutions until 1924 when the increasing activities of the Millowners rendered it desirable that they should have a separate organisation. The relations between the two bodies have always been most cordial and a former Chairman of the Chamber, Mr. J. A. Forbes, was one of the early Presidents of the Millowners' Association. The connection is illustrated afresh to-day in the person of Sir Joseph Kay, the present President of the Chamber, who is a former President of the Millowners' Association.

FUNCTIONS OF THE CHAMBER.

The functions of the Chamber were laid down at the time and embodied in its rules and regulations, the principal objects being set forth as follows :—

(1) To encourage and promote a friendly feeling and unanimity among commercial men on all subjects involving their common good.

(2) To promote and protect the trade, commerce and manufactures of India and in particular the trade, commerce and manufactures of the Bombay Presidency.

(3) To watch over and protect the general commercial interests of India or any part thereof and the interests of persons engaged in trade, commerce or manufacture in India and in particular in the Bombay Presidency.

(4) To consider all questions connected with trade, commerce and manufactures.

(5) To collect and circulate statistics and other information relating to trade, commerce and manufactures.

(6) To promote or oppose legislative and other measures affecting trade, commerce and manufactures.

(7) To adjust controversies between members of the Association.

(8) To arbitrate in the settlement of disputes arising out of commercial transactions between parties willing or agreeing to abide by the judgment and decision of the Association.

(9) To establish just and equitable principles in trade.

(10) To form a code or codes of practice to simplify and facilitate transactions of business.

(11) To maintain uniformity in rules, regulations and usages of trade.

(12) To communicate with Chambers of Commerce and other mercantile and public bodies throughout the world, and concert and promote measures for the protection of trade, commerce and manufactures and persons [illegible]d therein.

Among the more important subjects that have been dealt with by the Chamber in the past may be included the development of the Agricultural Resources of India, Commercial Education, Questions affecting Currency, Income Tax and Insurance; Shipping and Communications, The Imperial Customs Service, Port Administration, Short Reeling of Yarn, the Registration of Trade Marks, The Merchandise Marks Act, Registration of Partnership, Transfer of Property Act, Indian Cotton Excise Duty and numerous other Government measures and enactments which required consideration in the interests of the trades and industries of this Presidency and the Bombay city in particular as its largest commercial centre.

Scope and Activities of the Chamber.

Coming to more modern times, the scope and activities of the Bombay Chamber of Commerce have vastly increased and there is scarcely an aspect of public life which does not come within its range. It may truthfully be said that no important legislative or administrative measure is undertaken, either by the Government of Bombay or the Government of India, without the Chamber first being consulted and that too, often on subjects which at first sight appear remotely connected with commerce. To take some quite recent instances: the Indian Bar Councils Bill, Medical Education, and Professional Beggary in Bombay.

Railway Department and Port Trust.

There is no subject in which the Chamber has taken a keener and more continuous interest than in the development of the railway system of India. It has consistently advocated the construction of new lines, both trunk and branch, and the provision of more adequate railway facilities with a view to making available for export the ever-increasing quantities of the country's natural resources and distributing up-country manufactured goods from Europe. For years the Chamber urged the completion of the Nagda-Muttra line and it was very active in promoting branch and feeder lines until in February 1925 the Government of India announced that the practice of allowing private companies to finance branch lines would not be continued. The Chamber has long desired to see the Railways freed from a financial control which hampered their development and it accordingly warmly welcomed the decision to separate Railway from General Finance, thus enabling the Railway authorities to work on sound commercial principles and at the same time to look ahead and embark upon continuous programmes of new construction.

As a corollary to railway development the Chamber has been intimately associated with the Port Trust in providing adequate harbour facilities for shipping produce overseas and receiving imports from abroad. It strongly supported Sir Walter Hughes' proposals for dock extensions with the result that the Alexandra Dock was completed on the eve of the outbreak of war, thus enabling the Port to stand the strain imposed by war-time conditions without undue congestion and delay. Another matter to which the Chamber has always devoted close attention is local communications which have presented a serious problem as the result of the development of Bombay into a great modern city.

Other Work during the Pre-war Period.

This comprised currency and exchange, including the utilisation of the surplus Cash Balances in India and the location and composition of the Gold Standard Reserve; improvement of agriculture; fiscal questions; banking legislation; Indian Companies Act, 1913; uniformity in weights and measures; the Telegraph Department; factory legislation; and the Persian Trade routes. During this period as on more recent occasions the Chamber strongly opposed the imposition of octroi and terminal taxes, Government competition with private enterprise and the principle of double income-tax.

Work during the War Period, 1914-18.

With the advent of the Great War it become necessary to impose a number of prohibitions and restrictions on trade. These were loyally accepted by the Chamber and its members co-operated whole-heartedly with Government to make them effective. The question of Volunteering in India came under the consideration of the Chamber which urged Government to take steps to increase the numbers and efficiency of the Auxiliary Forces, and later it welcomed the creation of an Indian Defence Force, under which the services of every able-bodied European and a number of Indian Volunteers were made available for the Army in India. Questions arising directly out of the war were the liquidation of hostile trading concerns, the custody of enemy property and trade after the war, all of which claimed a large measure of attention as also the promotion of indigenous industries and the critical coal situation due in part to the shortage of railway wagons. A partial remedy for the coal shortage was eventually found by the Chamber undertaking the responsible task of taking delivery of the coal and allotting it to consumers. To the latter period of the war belongs the inception of the Reforms Scheme and the Chamber set forth its views on constitutional progress in a lengthy address to the Viceroy and Secretary of State. In 1918 it submitted certain comments on the Montagu-Chelmsford report. At this time too the Chamber tendered evidence before the Indian Cotton Committee and, through its representatives on the Bombay Indigenous Industries Committee, before the Indian Industrial Commission.

With the cessation of hostilities the Chamber bent its energies towards securing at the earliest possible moment the removal of all except absolutely necessary forms of Government control of trade. To meet some part of the cost of the war it suggested the issue of premium bonds which it was thought might draw out hoards of money lying dormant throughout India. The suggestion was, however, never acted upon by Government.

Other matters which received the Chamber's attention were anti-malarial measures, sanitation and public health in Bombay and a little later the coal shortage, which had again become acute; the violent fluctuations in exchange and the disastrous slump of 1921 which were sources of serious concern to the commercial community.

The Indian Central Cotton Committee.

The Chamber was in complete accord with the incorporation of the Indian Central Cotton Committee as a permanent body with a definite constitution and with funds of its own and authority to undertake specific work for the improvement of cotton growing. Its representatives on this body have put in much hard work, notably in connection with the Cotton Transport Bill. The Bombay Cotton Contracts Bill, which gave statutory recognition to the East India Cotton Association, was another important measure with which the Chamber was closely associated.

The Associated Chambers.

The year 1923 was a notable one in the annals of the Bombay Chamber which had the privilege of receiving for the first time delegates from sister Chambers of Commerce from all parts of India on the occasion of the annual general meeting of the Associated Chambers of Commerce of India and Ceylon, which was held under the chairmanship of Sir Frank Nelson, President of the Bombay Chamber. That year saw the accomplishment of two somewhat arduous pieces of work, *viz.*, the revision of the rules and regulations of the Chamber and the revision of the Bombay tonnage scale for steamers. The Chamber also tendered evidence before the Stock Exchange Committee, the Tariff Board and the Indian Mercantile Marine Committee.

Evidence before Commissions and Committees.

The last few years have been particularly busy ones marked by the activities of a number of important Commissions and Committees before most of which the Chamber tendered written or oral evidence and sometimes both. The two most important from the commercial point of view were the Indian Taxation Enquiry Committee and the Royal Commission on Indian Currency and Exchange. To the formidable questionnaire issued by the former body the Chamber submitted replies. When the Taxation Enquiry Committee issued their report a specia Sub-Committee was appointed to examine it and their views were embodied in a lengthy memorandum which was adopted by the Committee of the Chamber and forwarded to the Government of India. A strong case was made out for a modification of the existing Devolution Rule 15 and the inequity of the working of the Meston Settlement as regards this Presidency was emphasised. Octroi and terminal taxes were strongly condemned, as also super-tax on companies and the proposal to replace it by a Corporation Profits Tax. The institution of a comprehensive system of death duties was advocated and Government were strongly urged to set up a Central Road Board and initiate an all-India road policy. The Chamber's views in the latter connection were embodied in a resolution carried unanimously at the meeting of the Associated Chambers of Commerce at Cawnpore in 1926.

Much time was devoted by the Chamber to preparing evidence for the Hilton-Young Commission on Currency and Exchange in 1925 and to commenting on the report issued in 1926. Briefly stated the Chamber endorsed the findings of the Royal Commission though it doubted if the time was ripe for the issue of inconvertible notes. The Chamber also submitted replies to the questionnaire issued by the Economic Enquiry Committee and subsequently criticised their report. Other Committees which the Chamber endeavoured to assist by tendering evidence were the External Capital Committee and the Civil Justice Committee. In regard to the latter, emphasis was laid *inter alia* on the importance of establishing a special Commercial Court in Bombay and, from a recent communication received from the Chief Justice, it seems likely that the Chamber's representations have not been in vain. The Chamber is engaged at the present time in preparing evidence for submission to the Royal Commission on Agriculture.

The Coal Supply.

The delivery in Bombay of good quality coal at a reasonable price is obviously a matter of great importance to the commerce and industry of this city and the Chamber has always evinced a keen interest in coal questions. Recently it opposed a proposal to impose a protective duty on foreign coal and it may claim to have been to some extent instrumental in securing in 1925 a reduction of 10 per cent. in the railway freight on long distance coal.

Japanese Competition and Trade Depression.

The Chamber cordially welcomed the decision to suspend and subsequently abolish the Excise duty on cotton goods, a step which it had just previously been pressing on the Government of India. The Chamber has for some time been aware of the growing menace of Japanese competition in the Bombay market and with a view to provoking discussion its representative at the meeting of the Associated Chambers in Calcutta in December 1925 raised the question of the advisability of denouncing the Japanese Convention of 1905 as the first step towards taking retaliatory measures. The Chamber also tendered evidence before the Textile Tariff Board which conducted an enquiry into the Cotton Textile Industry in August 1926.

The prolonged trade depression led the Chamber to view with concern the financial commitments entailed by the heavy programme of development undertaken by the various large public bodies in Bombay, *viz.*, the Development Department, the Municipality, the Improvement Trust and the Port Trust and in 1925 the Committee addressed the Government of Bombay on the subject. Similar considerations led to the preparation of a detailed memorandum calling attention to the high cost of handling goods in Bombay and to the consequent diversion of trade to other and cheaper ports. From the replies received from the public bodies concerned it would appear that the Chamber's apprehensions were not without some justification and that it did well to call attention to the danger of allowing charges and expenditure to grow at a time when rigid economy was called for in every department.

Shipping Traffic: Mercantile and Passenger.

Shipping matters have naturally formed the subject of frequent reference to the Chamber and it may be of interest to mention some of those which have come up for discussion in recent years:—The Indian Carriage of Goods by Sea Act 1924, Assessment of tramp steamers to income-tax, Recruitment of lascar seamen and their employment in northern latitudes, Indian Seamen and the Workmen's Compensation Act, the Mercantile Marine Committee; Lighthouse administration, Deck Passengers' Committee's report, Construction of passenger ships, Life-saving appliances, Load-line regulations, Amendment of the Indian Wireless Telegraphy (Shipping) Rules.

Trade Unions and the Labouring Classes.

With the growth of industrialism in India the Chamber has had occasion to express views on a number of measures designed to improve the lot of the working classes, *e.g.*, Statistics Bill, Trade Union Bill, various amendments of the Indian Factories Act, deductions from wages or payments in respect of fines and prompt payment of wages.

The Stock and Share Market.

The Chamber has always set its face against the excessive speculation on the Bombay Stock and Share market leading, as it does, to periodical crises which sometimes reach scandalous proportions. It accordingly took an active share in promoting the passage of the Bombay Securities Contracts Control Act, 1925, and has since twice subjected to a searching scrutiny the rules which are to be issued in pursuance of the Act.

The Customs Department.

The smooth and efficient working of the Customs Department is essential to trade in a country which has adopted a policy of discriminating protection and the Chamber makes a point of keeping in close touch with the Collector of Customs, Bombay, and bringing to his notice cases of delay, etc. A new procedure in connection with claims for drawback was recently instituted after consultation between the Customs authorities and representatives of the Chamber. The raising of the general tariff rate has led the Chamber to press for the Customs staff to be strengthened and at the meeting of the Associated Chambers at Cawnpore in 1926, its representative moved a resolution, which was carried unanimously, suggesting that the time had come when the tariff schedule required amplification and clarification. It should be added that the Director-General of Commercial Intelligence meets representatives of the Chamber every year to discuss with them the annual revision of the Tariff Schedule in respect of articles assessed to duty at tariff valuations.

SOME MEMBERS OF THE MILLOWNERS' ASSOCIATION WITH MEMBERS OF THE CHAMBER OF COMMERCE.

Sitting, from left to right:—Mr. Manmohandas Ramji; Mr. Bomanji Dinshaw Petit*; Sir Cowasji Jehangir, Baronet; Mr. Ahmedbhoy Abhibhoy*; Sir Sassoon David, Baronet* Sir Vithaldas Damodhur Thackersey*; Mr. Vijbhukhandas Atmaram*; Mr. J. A. Wadia and Sir Dinshaw Petit (Second) Baronet.

Standing, from left to right:—Mr. J. F. Bradbury*; Mr. Dwarkadas Dharamsey*; Mr. C. J. Michael* and Mr. Leslie Rogers (Secretaries); Mr. N. B. Saklatvala, C.I.E.; Sir N. N. Wadia, K.C.B.E., C.I.E., and Mr. H. R. Greaves.*

* Now deceased.

Income-Tax and Super-Tax.

References on the subject of income-tax and super-tax are too numerous for mention. It will be enough to say that the Chamber has persistently urged the removal of super-tax on companies and is opposed to any raising of income-tax rates until the machinery of collection has been rendered more efficient. The question of the assessment to income-tax of contributions to provident funds has recently come to the fore and one of the Chamber's representatives moved a resolution at the Cawnpore meeting in 1926 recommending that properly constituted provident funds of firms and companies be brought within the scope of the Provident Funds Act, 1925, the benefits of which are at present restricted to Government and semi-Government provident funds.

General Activities of the Chamber.

Although on most subjects that are referred to it the Chamber is able to give a unanimous opinion there are certain questions of a controversial nature on which the interests of members conflict and the Chamber as a body must either refrain from giving an opinion or express itself in very general terms. Examples of such questions are :—Deferred rebates, Proposed standard form of Eastern Trade bill of lading, protection of the steel industry. There are two matters of general interest which have been referred to the Chamber more than once and on each occasion it has adopted a distinctly conservative attitude. These are the Decimal System and the proposed reform of the Gregorian Calendar.

Space forbids more than a bare recital of some of the other matters which have recently come under consideration, *viz.*, Stamp duty on cheques and bills of exchange ; Endorsements on bills of exchange ; Rate of exchange for bills drawn in foreign currency ; various amendments of the Negotiable Instruments Act, 1881 ; Indian Insurance Companies Bill ; Indian Arbitration Bill ; Excise duty on wines and spirits and the taxation of foreign alcoholic liquors in the Bombay Presidency ; Indian Meteorological Department ; Bombay Telephone Company and the proposed introduction of the message rate system of charges ; Public holidays.

Committees and Sub-Committees.

It is obvious that the Committee of the Chamber could not grapple unaided with this immense volume of work and to aid them in reaching decisions and preparing cases, four standing Sub-Committees were created some time ago and are reappointed each year, *viz.*, the Import Sub-Committee, Shipping and Export Sub-Committee, Docks and Railways Sub-Committee and Finance Sub-Committee. In addition special Sub-Committees are appointed from time to time to consider subjects requiring technical or expert assistance.

Frequent references are received from members of the Chamber and others on questions relating to the interpretation of the custom of the trade and the custom of the Port. Where it seemed desirable to do so the Committee have given a ruling and these were embodied in a book of " Decisions on Shipping and Mercantile Matters " published in 1924. It goes without saying that when legal points are involved enquirers are referred to their solicitors. The general body of members of the Chamber are kept informed of the proceedings of the Committee through the medium of the monthly excerpts.

For many years past it has been the practice of the office-bearers of the Chamber to greet Viceroys arriving in Bombay and speed them on their departure at the conclusion of their term of office. On such occasions an illuminated address of welcome or farewell is presented. Every endeavour is made to keep in close personal touch with the officials of the Government of India and the Committee make a point of meeting members of the Viceroy's Council and other high functionaries from Delhi and Simla as often as they are in Bombay for the purpose of exchanging views on current topics in informal discussion.

What the Chamber does?

It may be convenient to close this brief record of the Chamber's activities by quoting some extracts from the speech of the President, Sir Leslie Hudson, at the annual general meeting in 1925, when he endeavoured to answer the question—*What does the Chamber do for its members and other sections of the business world in particular and for the community in general?* Sir Leslie pointed out that,—

"The work of the Chamber may be regarded from three aspects—firstly, that of a trading concern supplying certain definite and tangible services to the commercial and industrial communities on a purely material basis, *i.e.*, the publication of statistical information relating to the import and export trade of the port in the form most convenient and acceptable to the interests concerned; the measurement of cargo for freight purposes by a trained and independent staff; and the maintenance of the necessary machinery for the settlement of disputes in connection with the purchase and sale of all the various classes of goods which go to make up the trade of Bombay."

* * * * * *

"The second way in which the Chamber seeks to justify its existence does not at first sight appear so practical but none the less is of ever-increasing importance. I refer to the facilities which it provides for the interchange of ideas and the ventilation of grievances in all matters affecting the relations between customer and trader and the merchant and the many authorities and organisations which provide and work the necessarily complicated machinery of Government in commercial matters. By this I mean the Port Trust, Municipalities and Government Departments, whose activities are so often regarded as hostile to trade interests but actually are the complement thereof. However much we may believe that the merchant should be left as free as possible to follow his calling without let or hindrance from the minions of Government, howsoever disguised, we must admit the necessity for some kind of independent authority to undertake the provision of certain services which although complementary to the merchant's work cannot in the nature of things be performed by merchants themselves. It is none the less however important to see that the servant does not either usurp the functions of the master nor seek to acquire more in the way of gain or power than is justified by his place in the scheme of things and it is accordingly to Chambers of Commerce such as ours that the merchant looks for the redress of his grievances in that connection and the conduct generally of the negotiations which in this democratic age are so often the only means by which the legitimate rights of both parties can be reconciled and secured."

* * * * * *

"Thirdly I think I shall have His Excellency's agreement when I say that the Chamber is able to be of no little assistance to his Government and also to the Government of India when its advice is sought on the many references which are invariably made to it in connection with all matters affecting the trade and industry of the city and of India in general."

It will be obvious from the foregoing brief record that the Bombay Chamber of Commerce has taken a very active part in the enormous expansion of the trades and industries of this Presidency which we witness at the present day. Composed of a body of influential members, well versed in commerce and finance, the Chamber has been instrumental in developing the indigenous resources of this country and the prosperity and well-being of the commercial classes. It has had a wide scope for its activities affecting all classes of trades and industries and it is our privilege to record the splendid work it has done in a publication that has been devoted expressly to the history and working of the textile industry with which the Chamber has had intimate and cordial relations.

Chairmen and Secretaries of the Bombay Chamber of Commerce.

Chairmen.

Mr. J. Skinner	1836-37
,, M. T. Brownrigg	1837-38
,, H. G. Gordon	1838-39
,, J. Skinner	1839-40
,, T. R. Richmond	1840-41
,, C. B. Skinner	1841-42
,, S. D. Murray	1842-43
,, J. Wright / ,, E. Lyon	1843-44
,, T. Cardwell	1844-45
,, J. Smith	1845-46
,, W. Graham	1846-47
,, John Parsons	1847-48
,, A. G. Latham	1848-49
,, Robert Strong	1849-50
,, W. S. Grey	1850-51
,, John Parsons	1851-52
,, A. H. Campbell	1852-53
,, H. B. Gilmour	1853-54
,, James Graham	1854-55
,, W. F. Hunter	1855-56
,, A. T. Binny / ,, H. B. Gilmour	1856-57
,, John Fleming	1857-58
,, Robert Ryrie	1858-59
,, H. D. Cartwright / ,, Henry Scott	1859-60
,, Andrew Grant / ,, George Hamilton / ,, George Lord	1860-61
,, James N. Fleming / ,, Michael H. Scott	1861-62
,, Robert Hannay / ,, Alexandra Brown	1862-63
,, Andrew Grant	1863-64
,, A. C. Gumpert / ,, Alexander Stewart	1864-65
,, A. J. Hunter	1865-66
,, W. Christian / ,, A. J. Hunter / ,, Alexander Brown	1866-67
,, J. Foggo	1867-68
,, Hamilton Maxwell	1868-69
,, H. E. Astley / ,, D. Graham	1869-70
,, A. D. Grant	1870-71
,, W. G. Hall	1871-72
Mr. J. K. Bythell	1872-73
,, H. E. Bright / ,, E. Lord	1873-74
,, D. Watson	1874-75
,, J. A. Forbes	1875-76
,, G. F. Henry / ,, Donald Graham	1876-77
,, Walter Lang	1877-78
,, M. Mowat	1878-79
,, C. Macdonald	1879-80
,, J. N. Graham	1880-81
,, E. Comber / ,, W. M. Macaulay	1881-82
,, James Thorburn	1882-83
Sir F. Forbes Adam, Kt., C.I.E.,	1883-84, 1884-85, 1886, 1887, 1888, 1889
Mr. A. F. Beaufort	1890*
,, L. R. W. Forest,	1890*, 1891, 1892*
,, J. L. Symons	1892*
,, R. S. Campbell	1893*
,, W. R. Macdonell,	1893*, 1894, 1895
,, A. F. Beaufort	1896
,, A. Abercrombie	1897
,, R. H. Macaulay	1898
,, A. Abercrombie	1899
,, William Greaves,	1900, 1901, 1902*
,, J. M. Dick	1902*, 1903
,, C. H. Armstrong	1904, 1905
,, H. E. E. Procter	1906
,, C. H. Armstrong	1907
Sir Henry Proter, Kt.	1908
Mr. C. H. Armstrong	1909
,, R. G. Monteath	1910
,, C. H. Armstrong	1911, 1912
Sir Chas. Armstrong, Kt.	1913
Mr. Marshall F. Reid, C.I.E.	1914
,, T. W. Birkett	1915
,, J. S. Wardlaw Milne	1916
,, Malcolm N. Hogg	1917, 1918
,, Nigel F. Paton	1919
,, A. H. Froom	1920
,, H. P. W. Macnaghten	1924
Sir Frank Nelson	1922-23
Mr. L. S. Hudson	1924
,, V. A. Grantham	1925
,, J. A. Kay	1926

(*Part year.)

Secretaries.

Mr. R. X. Murphy	1836-38
,, J. E. Brenan	1838
,, R. X. Murphy	1838-41
,, T. J. A. Scott	1841-46
,, John Connon	1846-57
,, John Mawson	1857-59
,, J. A. Crowe (Acting)	1858-59
,, H. Brooke	1859-64
Mr. James Taylor	1864-73
,, John Gordon	1873-84
,, David Watson (Acting)	1881-82
,, John Marshall	1884-98
,, Frederick Noel-Paton	1898-1905
,, J. B. Leslie-Rogers	1905-1911
,, R. E. Gregor-Pearse	1912-1920
,, C. B. Sayer	1921-1925

Mr. R. Sulivan appointed 1925

Mr. C. J. Michael was Assistant Secretary from 1887 to 1907 and acted as Secretary on several occasions.

Mr. FREDRICK NOEL-PATON.
1898-1905.

Mr. J. B. LESLIE-ROGERS.
1905-1911

Mr. C. J. MICHAEL.
1887-1908.

(*See page* 535.)

Mr. T. MALONEY.
(Appointed in 1923.)

SECRETARIES OF THE BOMBAY CHAMBER OF COMMERCE AND THE MILLOWNERS' ASSOCIATION.

The Millowners' Association, Bombay.

FOUNDED in Bombay in 1875 the Millowners' Association has taken an active part in the legislative and other measures connected with the textile industry and the working of the cotton mills. The early years of the Association required very careful handling of the attempts made by Lancashire manufacturers to abolish the import duties on yarn and foist a Factory Act on India in 1879 on the lines of the British enactment. The protests and representations that were made by the Association against these proposals had their effect on the British authorities. The Import Duties remained and the Factories Act had to undergo the various changes and modifications which were proposed by the Bombay millowners with the support of the Government of Lord Reay. The Act was passed in 1892 with the amendments suggested by the Millowners' Association and under the circumstances described on pages 473-475 of this volume.

The Registration of Trade Marks and Labels.

In addition to this the Association devoted its attention to the Registration of Trade Marks and Labels and submitted a representation in 1877 to Government suggesting the introduction of a Trade Marks Act for India. The Government of India, however, proposed an all-India Bill for the purpose, the registration office being located at Calcutta whose High Courts would also deal with any disputes arising in connection with the Act. Government also suggested, in 1881, the Registration of Trade Marks and Labels in London under the British Trade Marks Act, but the Bombay Millowners preferred to have the registration facilities in Bombay. The Government of India were, however, not prepared for a separate Trade Marks Act for India and the Bombay Millowners' Association decided, in 1886, to register the marks and labels of the different mills in the books of the Association and refer the disputes to arbitration. This arrangement has been continued up to the present day by the members of the Association.

Standardisation of Wages.

The Association made a serious attempt in 1891 to fix a minimum rate of wages for each department of a cotton mill and to arrange for a uniform code of rules for the observance and guidance of the workpeople. A good deal of thought and labour was bestowed on the subject, especially by the late Mr. N. N. Wadia, C.I.E., but the millowners as a body did not accept the proposals, and although the question was again taken up in 1893 there was no unanimity on the part of the millowners and the subject had to be abandoned.

In the same year (1893) the Mints were closed to the free coinage of silver and the yarn trade with China began to be seriously affected. Three years later, *viz.* 1896, the Excise Duty on mill-made cloth was imposed against strong opposition and protests from the millowners and remained in force till December 1925 when it was removed.

The Millowners' Association has been actively concerned in looking after the interests of the textile industry not only in the city and the Presidency but also in other provinces whose millowners are members of the Association. Its importance and influence have been recognised by Government and other public bodies and the members of the Association have been allotted seats in the Legislative Assembly, the Bombay Legislative Council, the Improvement Trust, the Port Trust, the Municipal Corporation, the College of Commerce, the Empire Cotton Growing Corporation, the Central Cotton Committee, the Royal Institute of Science, the Cotton Control Board, the Smoke Nuisance Commission, the Development Department and the Victoria Jubilee Technical Institute towards whose building funds the Association contributed the handsome donation of Rs. 1,04,500 in 1922.

BOMBAY MILLOWNERS' ASSOCIATION—MEMBERS OF THE COMMITTEE FOR 1905.

From left to right:—Sir Sassoon David, Baronet*; Sir Vithaldas Damodhur Thackersey*; Mr. Vijbhukhandas Atmaram*; Sir Dinshaw Petit (Second) Baronet; Sir N. N. Wadia, K.C.B.E., C.I.E.; Sir Cowasji Jehangir, Baronet; Hon. Mr. Manmohandas Ramji ;Mr. N. B. Saklatvala, C.I.E.; Sir Fazulbhoy Currimbhoy, Kt.; Mr. J. Benjamin*; Mr. C. J. Michael* (Secretary); Hon. Sir Dinshaw Wacha; Mr. J. A. Wadia and Mr. Ahmedbhoy Abhibhoy*.

In front to the right of Sir Sassoon:—Mr. Dwarkadas Dharamsey*; Sir Henry Proctor and Mr. J. F. Bradbury*.

* Now deceased.

Japanese Competition.

In 1898 the danger of Japanese competition came up for discussion before the Association and it is interesting to recall at the present juncture the contrary views expressed by the late Sir George Cotton and Sir Dinshaw Wacha at the early stage of the activities of Japanese merchants in the Bombay markets. Sir George Cotton expressed the opinion that the Bombay mills could successfully compete with China and Japan as Bombay had the raw material on the spot and an abundance of experienced and cheap labour. Sir Dinshaw Wacha, on the other hand, pointed out that the Bombay millowners should look far ahead and not to the immediate future because whatever the conditions of labour and other matters, every national industry was hampered by obstacles in its infancy which time and experience would soon remove and the same would be the case, said Sir Dinshaw, with the spinning and weaving industries in China and Japan. These conflicting opinions were expressed more than a quarter of a century ago, by two of the most experienced experts in the mill industry and Sir Dinshaw Wacha's opinion and advice have proved to be true at the present day.

A Whole-time Secretary.

From the date of the establishment of the Millowners' Association in 1875 and until the year 1923, the whole of its secretarial work had been performed by the staff of the Bombay Chamber of Commerce, whose Secretary was *ex-officio* Secretary of the Millowners' Association, the business being also transacted in the rooms of the Chamber. Under this arrangement, the Association made steady progress towards the high position it now occupies amongst Employers' Associations in India. Owing, however, to the great increase in volume and importance of the Association's work during the last few years, it was found necessary to engage the services of a whole-time Secretary and early in 1923, on the recommendation of the Committee, Mr. T. Maloney was engaged by the Chamber as the Technical Assistant Secretary and became responsible for the work of the Association under the guidance of the Secretary of the Chamber. A good deal of constructive work has been undertaken and successfully accomplished by the Association during Mr. Maloney's term of office, the more important being the standardisation of cloth contract forms used by the members and the evolution of satisfactory rules for the settlement by arbitration of all disputes arising thereunder.

The Workmen's Compensation Act had by this time received the assent of the Governor-General in Council and came into force on July 1st, 1924. The Committee of the Association had also before them a proposal to initiate a scheme of mutual insurance to cover the cost of claims arising out of the operation of this Act. The preliminaries connected with the scheme had to be pushed through in spite of a hostile press which characterised the measure as 'a leap in the dark', and in spite of the repeated attempts of the local Insurance Association to nip the movement in the bud by offering enormous concessions in their rates for compensation insurance. The scheme might have taken shape considerably earlier than it ultimately did had it not been for the mill strike of 1924, which necessitated the concentration of the energies of the Association in devising means for a speedy settlement. The strike ceased early in April 1924 and the Association was free to do what best it could within a period of barely two months to bring into fruition their efforts for the formation of the Mutual Insurance Association.

The Separation from the Chamber of Commerce.

The depression in the industry was also a matter of grave concern to the Association and it was evident that something should be done to obtain some relief. The magnitude of the task before the Association was fully realised by the Committee and it was recognised that the time had come when the Association should have a Secretarial staff of its own. This was done, but the reorganisation was an important event in the annals of the Association marking as it did the termination of a long and harmonious connection with the Bombay Chamber of Commerce. While the Committee regretted the change from this happy association subsequent events have proved that the reorganisation has contributed largely to the successes which ultimately resulted in the Association's operations and undertakings. The flotation of the Mutual Insurance Association, Ltd., in 1924, was the first child of the reorganisation, and Mr. T. Maloney and Mr. S. D. Saklatvala, then Chairman of the Association, were chiefly responsible for this piece of important constructive work. Among other work accomplished by the Association after its reorganisation may be mentioned the re-drafting of its rules and regulations and the complete revision of the Statistical Returns published by it.

In 1925 Bombay millowners had to face a strike of the workpeople which extended to every factory in the city involving 150,000 operatives in the Town and Island of Bombay. The strike began on September 15th, 1925, and ended on December 1st, 1925, the longest strike in the history of the Association.

Trade Depression.

Very important developments were also taking place in the mill industry in Bombay and the public were alarmed at the unprecedented trade depression. The Association realised that the time had come to make an effort to relieve the situation. The first step was directed towards the removal of the Cotton Excise Duty which was finally repealed after 18 months of intensive propaganda. At the same time the Indian mill industry was being gradually driven to the wall by Japan and the responsibility for pleading its case for protection before Government devolved on the Bombay Millowners' Association, and the Association's tussle with Government in this connection resulted in the appointment of the Textile Tariff Board by the Government of India in July 1926.

The Bombay Millowners' Association has not experienced more anxious periods of trade depression than it did in 1924-25. Its affairs have, however, been in the hands of active and practical workers well versed both in the commercial and technical departments of the industry. The relations between capital and labour have improved to an appreciable extent despite the ignorance and the illiteracy of the mill operatives and this happy change has no doubt been materially due to the more sympathetic treatment and the liberal provision made by the millowners for medical relief and welfare work for the benefit of the labouring classes, the Nowrosjee Wadia Maternity Hospital opening out a new era for women factory workers and their offsprings.

Chairmen of the Bombay Millowners' Association.

Mr. H. Maxwell, 1875, 1876-77, 1877-78.
Mr. J. A. Forbes, 1878-79.
Sir Dinshaw Maneckji Petit, First Baronet, 1879 to 1892.
Sir George Cotton, 1893 to 1900.
Mr. John R. Greaves, 1899 to 1902.
Mr. Bomanjee Dinshaw Petit, 1903.
Sir Sassoon J. David, Baronet, 1904, 1905.
Sir Vithaldas Damodher Thackersey, 1906, 1907.
Sir Fazulbhoy Currimbhoy, 1908.
The Hon. Mr. Manmohandas Ramjee, 1909.
Mr. Herbert R. Greaves, 1910.
Sir Dinshaw Petit, Second Baronet, 1912.
Mr. J. F. Bradbury, 1913.
Mr. Narottam Morarjee, 1914.
Mr. Jehangir B. Petit, 1915.
Mr. N. B. Saklatvala, C.I.E., 1916.
Sir Dinshaw E. Wacha, 1917.
Mr. C. N. Wadia, C.I.E., 1918.
Mr. N. G. Hunt, 1919.
Mr. Rahimtoola Currimbhoy, 1920.
Sir Joseph A. Kay, 1921, 1922.
Sir Victor Sassoon, Baronet, 1923.
Mr. S. D. Saklatvala, 1924.
Sir N. N. Wadia, K.B.E., C.I.E., 1911, 1925.
Mr. A. Geddis, 1926.
Mr. H. P. Mody, 1927.

Committee for 1926.

Chairman: Mr. A. Geddis. *Vice-Chairman:* Mr. H. P. Mody. *Members:* Sir Dinshaw M. Petit, Bart., Sir Victor Sassoon, Bart., The Hon'ble Sir Dinshaw Wacha, Kt., Sir Fazulbhoy Currimbhoy, Kt., C.B.E., Sir J. A. Kay, Kt., Mr. Lalji Naranji, M.L.C., Mr. Ratansi D. Morarji, Mr. Jehangir B. Petit, The Hon. Mr. Munmohandas Ramji, Mr. N. B. Saklatvala, C.I.E., Mr. S. D. Saklatvala, Mr. H. H. Sawyer, Mr. F. F. Stileman, Mr. F. Stones, O.B.E., Mr. Madhavji D. Thackersey, Mr. C. N. Wadia, C.I.E., M.L.C., Sir N. N. Wadia, K.B.E., C.I.E., and Mr. T. Watts.

Secretary: Mr. T. Maloney, M.C., A.M.C.T.; *Assistant Secretary:* Mr. J. P. Wadia, B.A.

The Late Mr. NASURWANJI S. JAMSETJEE. (*See page* 283).
Mr. Jamsetjee acted as the Auditor of the Millowners' Association until a short time before his death in 1924.

The Indian Merchants' Chamber.

WHILE Bombay possessed a large number of wealthy citizens among the Indian mercantile communities it had no special organisation of Indian merchants such as a chamber of commerce. Established so far back as in 1836 the Bombay Chamber of Commerce continued to be the sole representative body of the commercial interests in this city. The Bombay Millowners and the Bombay Native Piece-goods Merchants had established their own Associations, the former in 1874 and the latter in 1882. There was, however, no recognised institution to look after and voice the interests of the various trades and industries which were worked and financed by Indian merchants and traders. The Indian Merchants' Chamber was consequently formed in the year 1907 through the initiative and exertion of the Hon. Mr. Manmohandas Ramji and the co-operation of Sir Purshotamdas Thakurdas. The new Chamber met with the initial difficulties common to all public bodies at the early stage of their establishment, but it made its way under the guidance of these two members who also acted as its President and Vice-President respectively till 1913.

During its existence of 20 years the influence and utility of the Chamber has not only been maintained but has increased considerably. The rights and privileges of the Indian merchants have been safeguarded by it and their grievances have been placed before Government departments, the Railways and other public bodies with facts and figures which have invariably commanded attention and recognition. The Chamber has also been fortunate in having the active support of the most prominent members of the various mercantile and industrial concerns in the city including millowners, bankers, financiers and import and export merchants of all classes.

Distinguished citizens like Sir Fazulbhoy Currimbhoy, Sir Dinshaw Wacha, Mr. Lalji Naranji and Sir Phiroze Sethna have acted as Presidents of the Indian Merchants' Chamber, which has also been able to secure representative seats for its members on the Legislative Assembly, the Bombay Legislative Council, the Port Trust, the Municipal Corporation, the Royal Institute of Science, the Development Department and other public bodies in the city. The Chamber is also consulted by the Government of India and the local Government in all matters affecting the trades and industries of this Presidency and is recognised as the pioneer institution of its kind in the country. Its representations on questions affecting the mercantile and commercial interests of Bombay have been marked by a spirit of fairness and independence, while the care with which the statements and figures are presented have often met with the approval of the sister Chambers of Commerce and other commercial associations in India. The protest of the Indian Merchants' Chamber during the public agitation of 1920-21 against the operations of Reverse Council Bills had a marked influence on the currency and financial policy of Government. The Chamber has also been instrumental in forming an All-India Association of Indian Chambers of Commerce and Commer-

cial Associations and organised the first session of the Commercial Congress in 1915 under the Presidentship of Sir Fazulbhoy Currimbhoy, who also presided in 1920 at the joint meeting of this Congress and the Indian Industrial Conference. A third session of the Congress was again held in February 1926 at Delhi under the Presidentship of Lala Harkishanlal of Lahore and the Hon. Sir Phiroze Sethna as Chairman of the Reception Committee. The fourth session was held in Calcutta under the Presidentship of Sir Dinshaw Petit, Baronet, with Mr. G. D. Birla as Chairman of the Reception Committee.

The Indian Merchants' Chamber has thus proved its usefulness and influence in furthering the cause of the commercial and trading classes in India and of the Bombay Presidency in particular. Much of its success has no doubt been due to the careful manner in which the various problems of finance, taxation and currency have been handled by its Secretary, Mr. J. K. Mehta, M.A., whose intimate knowledge of economics and of the Indian dealers and their trade operations have contributed in no small measure to the prominent position which the Indian Merchants' Chamber has been able to secure among the commercial associations of this country.

Mr. J. K. MEHTA, M.A.

Mr. Mehta has been the Secretary of the Chamber since 1907. His services were however lent to the Government of India in 1917, when he acted as Assistant Controller, Indian Munitions Board, till the end of 1918. In 1921 Mr. Mehta was nominated Adviser to Mr. N. B. Saklatvala, C.I.E., delegate of Indian Employers to the International Labour Conference held at Geneva. After the Conference Mr. Mehta visited the principal Chambers of Commerce on the Continent and in Great Britain.

The Bombay European Textile Association.

THE expansion of the textile industry in Bombay has brought about the formation of Trade Unions and labour organisations for the benefit of the mill operatives and other working classes. The millowners had formed their own Association in 1874, while the Bombay Textile and Engineering Association was started in 1900 with a view to enlist the interchange of technical knowledge amongst the employers and the managers, masters, and other staff connected with the textile and engineering establishments and factories in the city. There was, however, no organisation for the Europeans engaged in the management of the cotton spinning and weaving mills in Bombay and the dyeing, bleaching, finishing and other departments connected with them until the Bombay European Textile Association was formed in 1919. Mill managers and overlookers and machinery fitters and engine erectors from Lancashire and other parts of Europe have been instrumental in training and educating Indians in spinning, weaving and engineering and latterly in the bleaching and finishing of cotton goods as stated on pages 288-293. They have to work in a trying climate and under various difficulties and discouraging circumstances and while their number has not increased in Bombay in recent years to any considerable extent they have continued to hold responsible positions in charge of concerns which have enjoyed a record of prosperous years. Many of them have risen to be millowners and machinery agents and have held prominent positions in the commercial and industrial life of Bombay. The Bombay European Textile Association has been established to protect (*inter alia*) the mutual interests of its members and to advance the prospects and success of the textile industry in particular. The members hold meetings for the discussion of subjects which affect their work and standing individually or collectively and the Association can command unity of opinion and action for the achievement of its object which individuals may be powerless to obtain. Advice and information are given for the common good of the members through experts and experienced officials of the Association, which also sends its representatives on Commissions or Committees appointed by Government or the millowners and other public bodies in connection with the mill industry. The Association is also in a position to offer suggestions on a proposed Bill or Legislation which may affect the textile industry and the staff and workpeople employed in the factories and all such Legislation is referred by Government to the Association for comment and criticism, and a great deal of work has been done by the Association in this direction. Educational and research work and other matters pertaining to the welfare and status of the spinning and weaving concerns in Bombay also receive the careful attention of the Bombay European Textile Association which has now on its list 115 active members and 70 associate members. The former class is confined to Europeans directly employed in the textile industry in Bombay while the associate membership is intended for Europeans who are directly engaged or interested in the textile industry in the British Empire.

The Association has been able to do good work since its formation and has dealt with questions and suggestions affecting the well-being and prospects of the European community engaged in the Bombay cotton mills. The office-bearers for 1927, are Mr. J. B. Green, Chairman. Mr. J. Taylor, Vice-Chairman. Committee :—Messrs. F. Bucknall, L. B. Ashworth, J. Allanson, H. Denison, W. W. Gregory, R. G. Hardman, W. J. Lewis, W. Ridyard, J. T. Nolan and J. A. Sutton. Hon. Secretary :—Mr. W. J. Lewis. The Association's address is at Red House, Bombay Dye Works, Dadar, Bombay.

The Native Share and Stock Brokers' Association.

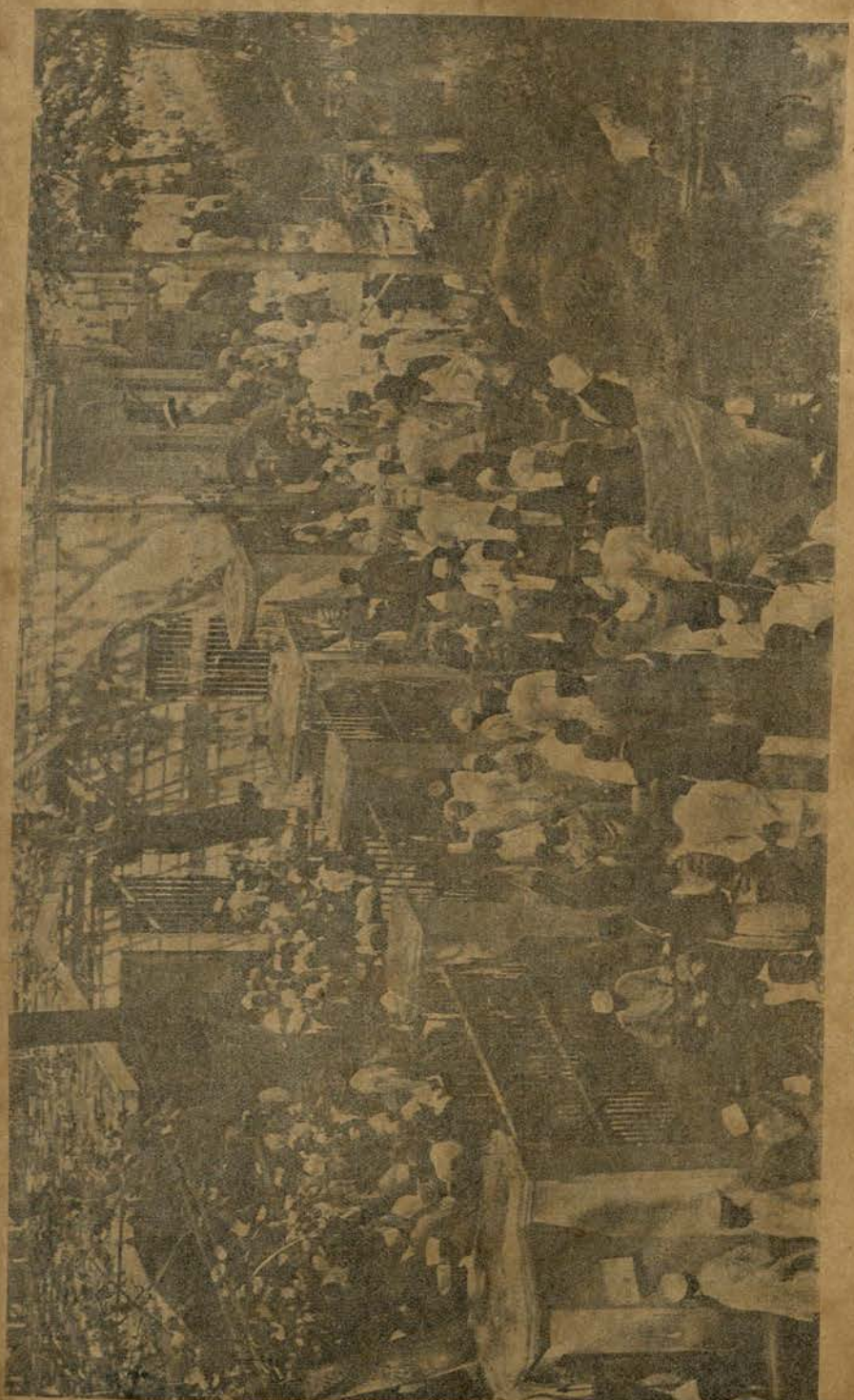
Early History.

BETWEEN the years 1840 and 1850 there were in Bombay no more than 6 brokers in stocks and shares recognised by the banks and merchants. This number sufficed for the limited business then existing in the shares of banks and presses, and till the year 1855 the meeting-place of brokers was on the Cotton Green shown on page 459 where Elphinstone Circle is now situated. By the year 1860 the number of brokers had increased to 60, of whom the leader was Mr. Premchand Roychand, and he gave to the stock and share brokers of Bombay a standing and importance they had not achieved in previous years. For a time the brokers met between the old Fort walls and the old Mercantile Bank where stand to-day the shop of Treacher & Co. and the Central Bank building. Their number would perhaps have slowly increased had not the American Civil War of 1861 and the demand for cotton thereby arising brought into Bombay a vast amount of wealth. An outlet was found for this wealth in the promotion of many worthless and fantastic adventures to which reference is made on page 13. The brokers under their acknowledged leader, Mr. Premchand Roychand, became possessed on this occasion of great influence, authority and wealth. They were looked upon as infallible guides to fortune and they numbered about 250 and obstructed without let or hindrance the streets, the shops, the banks and the footpaths. But the end of the American Civil War brought disillusionment and heavy failures and the brokers decreased in number and in popularity. Finally they found in Dalal Street a place where they could conveniently assemble, and on that spot the office of the *Advocate of India*, has now been erected. However, they again increased in number, there being 320 in 1877. The members of the Association who now actively pursue their calling in Bombay number about 200 out of a total of 478. The majority of these are Gujarati Hindus and Parsis, and as in 1877 the minutes of their proceedings are still kept in the Gujarati language.

The Constitution of the Association.

The Native Share and Stock Brokers' Association of Bombay is a voluntary association, the object being the protection of the interests of the members and the provision of a market-place wherein the members of the Association and through them, the public, may buy and sell stocks, shares and like securities. For many years subsequent to its establishment in 1887, the Association conducted the business of what is in effect a great public market in securities not only to the advantage of its members but to the advantage of the public. Its formal constitution in 1875 followed a resolution of certain Bombay brokers to form an association for protecting the character, status and interest of native share and stock brokers and for providing a hall or building for the use of the members of the Association; to promote honourable practice; to suppress malpractices; to settle disputes among brokers; to decide all questions of usage and courtesy in conducting brokerage business.

None but natives of India have been admitted as members of the Association, but the rule has recently been altered to admit to membership a British subject who has himself resided in the Bombay Presidency for ten years. It is for the Association to determine what period of residence is considered necessary to qualify for admission to membership of the Association.



THE NATIVE SHARE AND STOCK BROKERS' HALL, BOMBAY.

The admission fee, which is the price of the card or right of membership, was originally Rs. 51. It was afterwards raised to Rs. 1,000, and cards were sold by the Association in 1909 for Rs. 2,500 and in 1917 for Rs. 7,000. In 1920 the cards brought as much as Rs. 48,000 for the right of admission to the Brokers' Hall.

The Clearing House.

All contracts entered into between members on the Exchange calling for the delivery securities on forward list are cleared through the Clearing House. Only active and well-established securities are admitted to the dealings for monthly settlements. The unit of trading is generally as low as one share. The Clearing House is managed by the Bank of India, Ltd., and is under the control of the Committee of the Association. It not only eliminates a host of intermediaries and brings the original seller and the ultimate buyer together but also clears the securities and payments thereof and also differences. The Banking institutions are allowed to clear securities on behalf of their clients direct through the Clearing House. The clearing is carried on the *pro rata* principle as in Paris and New York, because a *pro rata* clearing differs from the trace or continuity system of settlement followed in London in that in case of insolvency of a member losses on contracts with the insolvent established by selling out or buying in on announcement of the failure are assessed back *pro rata* on the parties having original contracts with the insolvent on his clearing sheet.

The Management and Control.

The Association is constituted by its members in general meeting assembled and of a Committee of Management and subsidiary Committee, with a President and other office-bearers. The general management and control of the Association's affairs is vested in the Committee as also its income and property, the power of appointing its officers and servants, and of framing such by-laws and rules as may from time to time be necessary for the guidance of members, and the power generally to do all such acts as may appear necessary for carrying into operation and effect the objects and purposes of the Association.

The Association has been fortunate in its choice of Presidents; Mr. Chunilal Motilal held the post for 20 years, Sir Shapurji Broacha exercised his authority as President for more than 20 years, which was not disputed though with increasing age his power and influence had declined. On his death in 1920 he was succeeded by Mr. Kikabhai Premchand, the son of the late Mr. Premchand Roychand, the famous broker and financier of former years. Mr. Kikabhai Premchand resigned in 1922 and for some months the office of President remained vacant, until Mr. K. R. P. Shroff was elected to fill the office which he still holds, having worked hard and loyally for what he believes to be the best interests of the Association.

The present building was acquired for Rs. 1,00,000 and was opened by Mr. J. M. Maclean, M.P., in January 1899, but it proved insufficient for the increasing business of the Association and an adjoining building was purchased for Rs. 10,30,000 in 1920. This was the boom period and the price clearly illustrates the fabulous and fictitious change in the values of properties because in 1913 this very building had been sold for Rs. 73,000. Money was obtained for this purchase by the admission of new members at a fee of Rs. 30,000 to Rs. 40,000, but with the decline in business the admission fees decreased, and the Association has still been unable to proceed with the new building for which plans have been prepared.

Corners and Speculations: Enquiry Committee.

The years which immediately preceded and followed the termination of the great war of 1914-18 brought trouble and anxiety for the members of the Association. Speculation was rife in the city of Bombay as was the case during the years of the American War. Rising prices attracted ignorant people to speculation and corners in the market, once an event of rare occurrence, became frequent. The manipulation of the market was in practised hands, and they saw in a few months the dissipation of the savings of several years. As the result of a resolution in the Legislative Council in 1922 a Committee was appointed in 1923 to enquire into the constitution, government, customs, practices, rules, regulations and methods of business of the Native Share and Stock Brokers' Association and to investigate such complaints of the public and to make such enquiries with reference to any matter appertaining to the Association as the Committee may deem proper. The Committee was also to protect the investing public against the interested or irregular control of business, and formulate definite proposals for the future constitution, control, direction and regulation of the Association as the Committee may deem proper.

The following were appointed members of the Committee:—Sir Wilfrid Atlay, *Chairman*; Sir Fazulbhoy Currimbhoy, Sir Purshotamdas Thakurdas, Mr. R. Lindsay, Sir Victor Sassoon, Baronet; Mr. Bhulabhai J. Desai, Mr. Pherozeshah M. Dalal, and Mr. G. Davis, I.C.S., *Secretary*.

The Committee submitted its report in 1924, all members signing it excepting Mr. Bhulabhai J. Desai, who made a separate minute with suggestions of his own.

The Association accepted most of the recommendations contained in the Report except that of the treatment of corners and it also agreed to substitute for the existing rule of corner the modified rule proposed in the Minority Report. The Government of Bombay by a resolution accepted the views of the Association asking it to introduce rules adopting the recommendations as accepted by the Association.

Further Speculation: The Act of 1925.

However, the share market was again disorganised in 1925 through reckless speculation and corners and the Association's operations had to be temporarily suspended. The panic that was caused on this occasion and the heavy losses incurred by the speculators and misguided investors necessitated the passing of Bombay Act No. VIII of 1925. This Act provides for the regulation and control of the contracts for the purchase and sale of securities other than a ready delivery contract, and the recognition by Government of a Stock Exchange. Such contracts are void unless made subject to and in accordance with the rules sanctioned under the new Act and through a broker of the recognised Stock Exchange.

In accordance with this provision the Native Share and Stock Brokers' Association has submitted its rules for recognition and they are expected to come into operation early in 1927.

The Bombay Port Trust.

As the controlling body for the administration of the import and export trade of the port of Bombay the Port Trust holds a leading position among the public institutions of this city. The Trust has coped with the rise and progress of the trade and commerce of Bombay with an efficiency that is reflected in the extensive dock accommodation, the arrangements for the shipping in the harbour and its lighting, the terminal railway stations and yards, the various depots for bulk oil, coal and cotton and the large estates and reclamations with facilities for the reception and embarkation of passengers and their luggage which are unsurpassed by any other port in the world.

Established as a Public Trust under the Act of 1873, The Bombay Port Trust has taken an active part in the development of the city's resources to meet the growing needs of the commercial and industrial classes and the enormous quantity of merchandise which passes through the port, the volume of cargo handled during 1926 being 6,460,000 tons.

The population of Bombay when the Trust commenced its operations in 1873 totalled 644,000 while according to the census returns it had risen to 1,200,000 in 1922. The value of the trade of the Port at the time of the constitution of the Trust was about Rs. 57 crores a year; in 1924-25 it had risen to Rs. 359 crores or £269,250,000. The principal imports and exports are as under:—

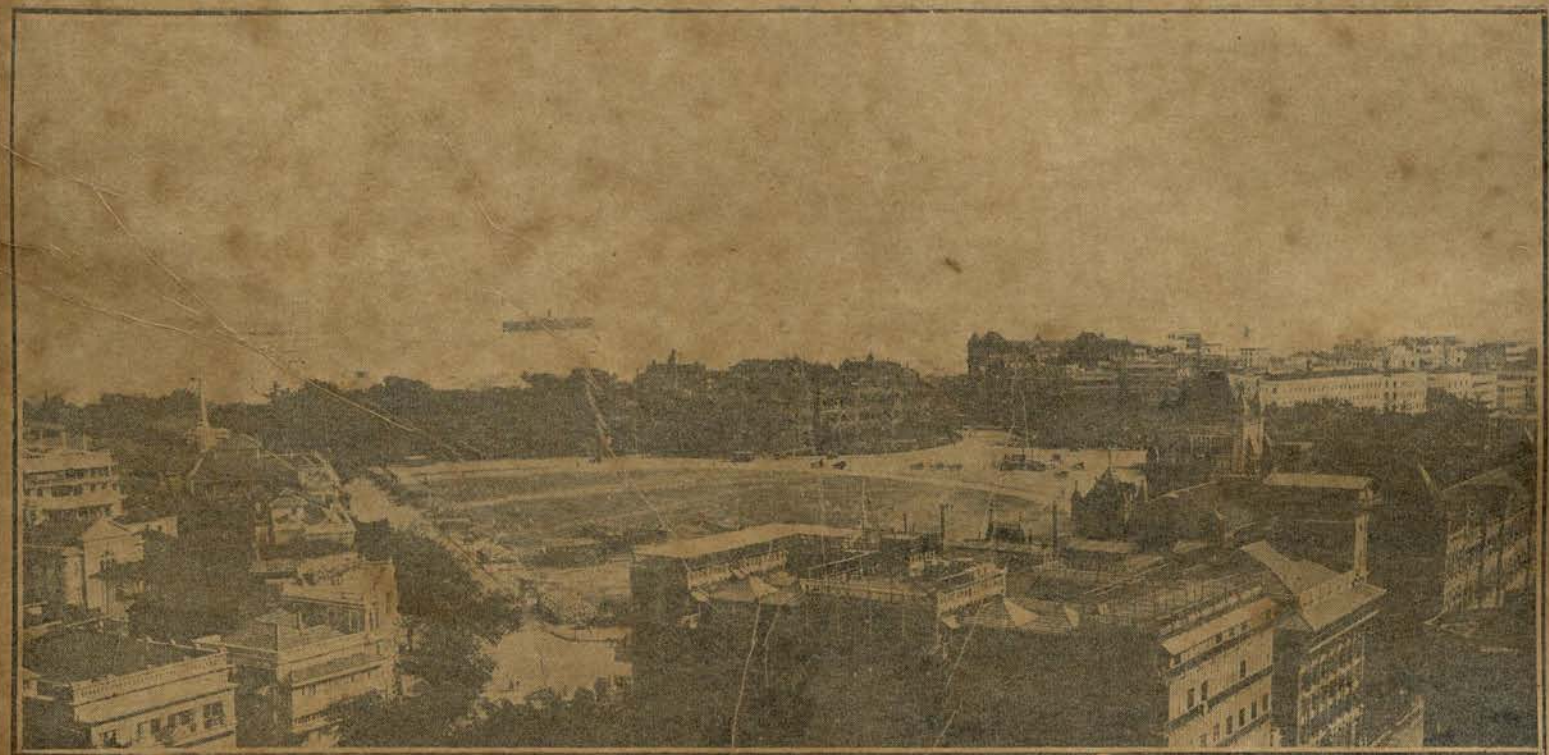
Imports.	*Exports.*
Piecegoods.	Cotton.
Metals and Hardware.	Piecegoods.
Sugar.	Grain.
Machinery.	Seeds.
Rice.	Ground-nuts.
Kerosene oil.	Myrabollams.
Petrol and liquid fuel.	Twist and Yarn.
Glassware.	Oil-cakes.
Motor cars.	Wool.
Oilmanstores.	Manganese ore.
Paper.	

The magnificent harbour, one of the finest in the world, provided berthing for the ships which came from Great Britain and Foreign countries, till the Docks were built to make Bombay an up-to-date port in keeping with its position as *Urbs Prima in Indis*.

The Prince's and Victoria docks can hold 20 vessels of over 400 feet and 6 vessels of smaller dimensions and the Alexandra Dock, which is larger, can hold 20 vessels of over 500 feet. There are, in addition, two dry docks and numerous bunders and basins for the handling of country craft.

The landed estates of the Trust at the early period of its constitution in 1873-79, had an area of 550 acres while the present area including the Mazagon, Sewri and other reclamations is 1,880 acres or nearly one-eighth of the total extent of the City and Island of Bombay.

The railway yards and stations are connected with all the main lines of India and goods and passenger traffic is handled efficiently and with the minimum of delay and expense.



A BIRD'S-EYE VIEW OF BOMBAY HARBOUR WITH THE OVAL AND RAMPART ROW. *(Special Photo.*

(This Photograph was taken before the Ballard Estate and Mole Station were built and before the Oval was occupied by Buildings.)

The new and extensive cotton depot is described on page 457, while brief reference is made in the present article to the bulk oil installations, the land estates and other activities and operations of the Trust from information and figures which have been specially obtained for this publication.

The administration of the Bombay Port Trust is vested in the hands of a Board of Trustees which has always been composed of citizens and officials who have made their mark in the commercial and public life of Bombay, the operations and responsibilities of the Port Trust being of the highest importance and commercial value not only to Bombay City and the Presidency but to all centres of trade and commerce throughout India.

The Port of Bombay: Geographical Situation.

Bombay is the chief port of Western India and the capital of the Bombay Presidency which, including its feudatories and Aden, comprises an area of 187,074 square miles. The City of Bombay which is situated on an island of the same name in latitude 18° 54' N., longitude 72° 49' E., owes its importance to its geographical position and its magnificent natural harbour. Its central situation on the Western seaboard, in direct communication with the principal markets of India and the sea-ports of Europe and the Far East, make Bombay the chief gateway of Indian commerce and the natural collecting and distributing centre for the overseas trade of Western and Central India.

Early History.

At the time of the first European settlers, about 1534, what is now the Island and City of Bombay consisted of a group of seven islands, which have gradually been consolidated by reclamation to form the present Island of Bombay, some 25 sq. miles in area. In 1661 the Islands were ceded to the British under the Marriage Treaty between Charles II and the Infanta of Portugal and seven years later Bombay was handed over by the Crown to the East India Company "in free and common socage" at an annual rental of £ 10. At this time the population of Bombay was 10,000; by 1764 it was 60,000 and in 1922 it had reached 1,176,000. According to the latest census (1922) the population of the Bombay Presidency, of which Bombay City is the capital, was approximately 26,700,000.

Formation of the Port Trust.

The joining up of the islands and the early reclamations carried out were largely the work of private individuals to whom the submerged lands were granted in perpetuity on condition that they were drained and reclaimed. The rapid increase in the extent of the developments carried out by private enterprise resulted in the Government deciding in 1869 to buy up the private rights and vest the control of the foreshore estates and the power of levying dues in the hands of a Board of Trustees, which was constituted and took up its duties in 1873. The administration of the Port, including lighting, pilotage, docks, bunders, railways and landed estates is controlled by this Board, which consists of a Chairman and 20 Trustees, 7 of whom are officials nominated by Government, while the remainder represent the various mercantile and shipping interests and the Municipal Corporation.

The Harbour.

The Harbour, one of the finest in the world, is a deep arm of the sea between the Island of Bombay and the mainland, with a length of 12 miles, general width of from 4 to 6 miles and an area of about 70 square miles. The general depth varies from 20 to 40 feet. The mean range of tide is 13.9 feet. The harbour is well protected from the monsoon and the approaches are excellently lighted, the principal lighthouses being one on Kennery Island about 11 miles south of the extreme southerly point of Bombay and the other, the Prongs Lighthouse on Prongs Reef, which is about one mile south of the same point.

Early Activities of the Port Trust.

During the first ten years of its existence, from 1873 to 1883, the energies of the Board were mainly devoted to the development of its Elphinstone Estate, the acquisition of further foreshore lands and private rights as far north as Sewri, and the construction of the Prince's Dock. The next ten years, from 1883 to 1893, saw the construction of the Victoria Dock and the Merewether Dry Dock. It was in 1894 that the scheme for a Port Trust Railway and for extensive reclamations on the Trustees' Northern Estates was first brought forward. The lack of adequat railway communication with the Docks had a most hampering effect on all kinds of trade, but more especially on the cotton industry, since all cotton had to be carried to Colaba, and carted thence whether to the mills or to the docks. At the same time, the lack of space for other trades also, such as grain, iron, manganese, coal and mineral oils was becoming ever increasingly felt. It was, therefore, decided to construct a railway within Port Trust limits and also to reclaim an area between Sewri and Mazagon, measuring 571 acres. The reclamation was completed by the year 1913, though much filling in and surfacing had still to be done. Meanwhile the Alexandra Dock and the reclamation known as the Ballard Estate had also been completed. In 1919 the question of the removal of the cotton trade to Sewri was actively taken up. It was originally proposed to place it on the east of the grain sheds but the advantage of proximity to Reay Road led to its being finally located on its present site, as described on page 457.

The Trade of the Port.

The principal imports are piece-goods, metals, sugar, machinery, rice, kerosene oil, liquid fuel, petrol, glassware, motor cars, oilmanstores, paper and hardware. The principal exports are cotton, piece-goods, grain and seeds, groundnuts, myrabollams, twist and yarn, oil cakes, wool and manganese ore.

The most important commodities handled at the Docks and Bunders during the year ending 31st March 1926, were as under :—

Imports.		Exports	
Kerosene oil	.. 45,000,000 gallons.	Cotton	.. 2,867,000 bales.
Liquid fuel	.. 62,000,000 ,,		
Petrol	.. 7,500,000 ,,	Grain and Seeds	.. 711,000 tons.
Iron and Steel	.. 234,000 tons.	Manganese ore	.. 241,000 ,,
Machinery	.. 165,000 ,,		
Grain and Seeds	.. 350,000 ,,	Piece-goods	.. 290,000 pkgs.
Coal	.. 293,000 ,,	Twist and yarn	.. 176,000 bales.
Sugar	.. 192,000 ,,		
Piece-goods	.. 280,000 pkgs.	Groundnuts	.. 85,000 tons.

The volume of cargo handled in the Port during the financial year ending 31st March 1926 was 6,460,000 tons. 3,200 steamers aggregating more than 4½ million tons (net register) entered the Port during the year, besides 45,000 sailing vessels, most of the latter being engaged in coasting trade. The value of the trade of the Port has risen from Rs. 182 crores (=£136,500,000) in 1917-18 to Rs. 359 crores (=£269,250,000) in 1924-25.

The following figures show the gross revenue of the Trust since 1917-18 :-

	Lakhs Rs.
1917-18 ..	178.30
1918-19 ..	192.62
1919-20 ..	196.90
1920-21 ..	222.97
1921-22 ..	217.17
1922-23 ..	259.62
1923-24 ..	260.71
1924-25 ..	273.76
1925-26 ..	284.13

The Dock Accommodation.

The Port has commodious dock accommodation, and is well equipped with modern handling appliances and machinery. The principal enclosed Docks are :—

The Wet Docks :—THE PRINCE'S DOCK, area 30 acres for vessels drawing up to 25 ft.; depth over entrance sill 28'-3" H.W.O.S.T. Accommodation—7 vessels over 400 ft. and 5 smaller vessels. Crane equipment.—One 30-ton fixed crane, one 5-ton crane and fifty-five 30-cwt. portable cranes.

THE VICTORIA DOCK, area 25 acres for vessels drawing up to 27 ft.; depth over entrance sill 30'-3" H.W.O.S.T. Accommodation—13 vessels of 400 ft. and 1 of 350 ft. Crane equipment.—One 100-ton fixed crane, fifty-eight 30-cwt. portable cranes.

THE ALEXANDRA DOCK, area 49½ acres for vessels drawing up to 37 ft.; depth over entrance sill 41'-3". Accommodation—20 vessels of over 500 ft. Crane equipment.—One 60-ton floating crane, four 6-ton movable hydraulic cranes, eighty-five 35-cwt. portable hydraulic cranes. Oil bunkering connections have been provided to most of the berths.

There are also several runabout cranes and a specially equipped barge for reception of oil waste.

The Dry Docks :—THE MEREWETHER DOCK, size 500' ×65' ×24'-5"; depth over entrance sill 25'-4" H.W.O.S.T.

THE HUGHES DOCK, size 1,000' ×100' ×36'-6"; depth over entrance sill 34'-3" H.W.O.S.T.

R. M. S. "MOOLTAN," 20,700 TONS, BERTHING AT BALLARD PIER. [Photo: Clifton.

LIEUT-COL. W. H. NEILSON, O.B.E., V.D., M. INST. C.E., CHAIRMAN.

THE ALEXANDRA DOCK, WEST WHARF.

The Transit Sheds and Warehouses cover 3,200,000 sq. feet and provide ample accommodation for goods in transit. A new three-storied transit shed 400' long and 120' wide, with a floor area of 140,000 sq. feet is now nearing completion at No. 9 Berth, Alexandra Dock.

Bunders and Timber Ponds.

A number of Bunders or open wharves for country craft have also been provided along the waterfront and are equipped with cranes or other facilities for loading and unloading cargo. Coasting traffic constitutes a considerable proportion of the trade of the Port and during 1925 more than 45,000 sailing vessels entered the harbour. The Timber Ponds, an enclosed area of 67 acres, have been provided at Sewri for the convenience of the Timber Merchants, many of whom have their Saw Mills in the vicinity. Burma Teak, Malabar, Poon and other varieties of timber are stored and seasoned in the Ponds until required. Cranes and sidings are provided for expeditious handling of the logs.

Ballard Pier.

The wall on the west side of the entrance lock to Alexandra Dock is extended for a distance of 1,500 feet and forms the Ballard Pier Station which is a terminal passenger station with direct communication to all the railway systems of India. The Mail berth is dredged to 32 feet L.W.O.S.T. and the largest steamers using the port can lie alongside at all states of the tide and embark and disembark passengers and mails. The facilities at Ballard Pier for reception and embarkation of mail passengers and their baggage are generally acknowledged to be unsurpassed by any passenger port in the world. Accommodation is also provided in the building for the Postal Department where the foreign mails are sorted.

The Port Trust Railway.

The Port Trust Railway connects the Docks and Depots with the main line Railways by means of a large Interchange Yard at Wadala; over 100 miles of track have been laid and the Railway now handles nearly 50 per cent. of the terminal goods traffic of the city. Its rolling stock comprises 36 locomotives and 685 wagons. The Wadala Sorting Yard, which is situated just south of the junction with the main line Railways, is over a mile long and has an elaborate system of gravity sidings and facilities for sorting wagons, both inwards for the depots and docks and outwards for the trunk railways.

The Port Trust Depots.

On the Mazagon-Sewri Reclamation, an area of 518 acres reclaimed from the sea, are situated the principal storage depots, which are all connected by railway with the docks and the main line systems. The more important depots are :—

THE GRAIN DEPOT consisting of 6 large sheds 1,000 feet long by 110 feet broad, 7 smaller ones 500 feet long and a number of open plinths—capacity 1,338,000 bags. The depot is completely self-contained and provided with roads, railway sidings and all conveniences for the trade.

THE COTTON DEPOT, described on page 457, is probably the largest and most up to date of its kind, and covers an area of some 127 acres of reclaimed land on which the Port Trust has erected 178 reinforced concrete godowns equipped with sprinkler protection, 265 open plinths, 20 railway reception and despatching stations, and a railway yard with 8 miles of track. Fire Brigade and Salvage Corps Stations, dispensaries and other facilities for the trade have also been provided. The Depot provides covered storage for about one million bales of cotton and open storage for about the same number. During the busy season, November to June, as many as 2½ to 3 million bales are railed in over the Port Trust Railway and unloaded at the Depot, the deliveries from the Railway Sheds amounting to as many as 27,000 bales per day. Provision has been made for extension of the Depot, when necessary, to meet further expansion of the staple trade of Bombay. The cost of the Depot was approximately £1,000,000.

THE MANGANESE ORE DEPOT provides storage accommodation for over 100,000 tons and is fully equipped with railway sidings, weighbridge, etc.

THE COAL DEPOT, which has lately been completed by reclamation from the Harbour at a cost of Rs. 42½ lakhs, covers an area of 18½ acres of land; in addition to providing ample accommodation for the sea-borne coal trade there is also a capacious Hard for repairs and survey of tugs, launches and small craft. There are also special depots for iron, railway materials, etc.

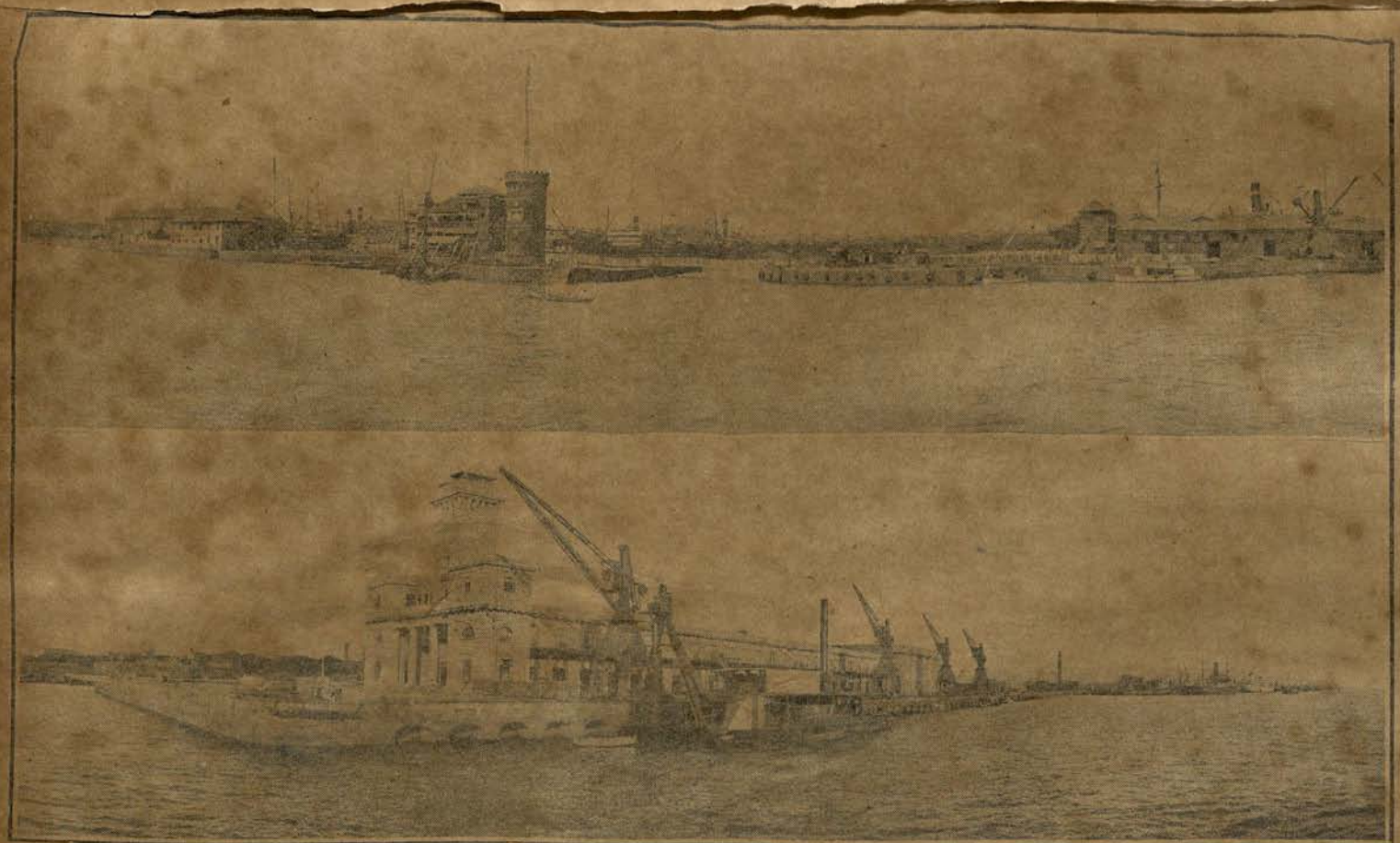
Lay-out of the Railway.

On the east side of the cotton depot is the railway yard, with stations and offices. There are 6¾ miles of track within the yard, with a design for 24 goods sheds, each 250 feet long by 50 feet wide, each giving room for standing 2,000 bales at a time. Out of these 16 have been actually constructed, arranged continuously in echelon, to allow of separate sidings for each shed. The sheds have flat roofs, and on three of them offices and quarters are erected.

The Bulk Oil Installations.

Immediately north of the Mazagon-Sewri Reclamation are the bulk storage tanks of the great Oil Companies situated on land leased from the Port Trust. The installations are connected to the Railway by private sidings and by pipe line connections to the Bulk Oil discharge berths at the Docks and Fir Pau Pier, which is situated at the north of the Harbour on the Island of Trombay. The total capacity of the various Bulk Oil installations is about 35 million gallons. The enormous development in the oil trade of Bombay may be gauged from the fact that the imports of liquid fuel have risen in the last 7 years from 18½ million gallons to 62 million gallons while exports (bunkering) have risen from 1½ million to 18½ million in the same period. As a result of the provision of a special oil pier at Trombay for the importation of petrol in bulk the imports of this commodity have risen from half a million gallons in 1918-19 to 7½ million in 1925-26. The imports of kerosene last year were 45 million gallons.

COTTON FOR EXPORT: VICTORIA DOCK. [*Photo: Clifton*



Top :—ENTRANCE FROM THE HARBOUR TO THE PRINCE'S AND VICTORIA DOCKS. [*Photos : Clifton*

Bottom :—THE MAIL BERTH ON BALLARD PIER WITH THE ROCK BREAKER AT WORK.

The Land Estates.

The development of the Trust has been materially assisted by the revenue derived from the large landed estates vested in the Trustees, consisting of the properties purchased from Government and private owners at the formation of the Trust and the areas since made available by reclamation from the Harbour. The area of the estates vested in the Port Trust at the time of its constitution—1873-1879—was about 550 acres. The present area of the Trust's properties, inclusive of the reclamation effected, is some 1,880 acres or roughly one-eighth of the total extent of the City and Island of Bombay.

The Ballard Estate, the most recent addition to the Trust's properties, stands on reclaimed ground south of Alexandra Dock and has been developed as a first-class business and residential centre. The Estate contains a number of very handsome buildings, prominent among them being the offices of the P. & O. and British India Steam Navigation Companies and the imposing new Custom House. The Wadala Reclamation, which is not yet finally developed, comprises some 274 acres which is designed to accommodate factories and industries of various kinds.

The Antop Model Village, which is situated near the northern boundary of the Port Trust Estates, was constructed in the years 1919-20 and houses a population of about 1,700 Port Trust workmen and their families. The accommodation provided is on the most up-to-date and sanitary lines and aims at being a model for the rest of the Presidency. Most of the cottages are of reinforced concrete but some are of brick with tiled roofs. Amenities such as schools, playgrounds, dispensaries, markets and places of worship for all creeds are being provided.

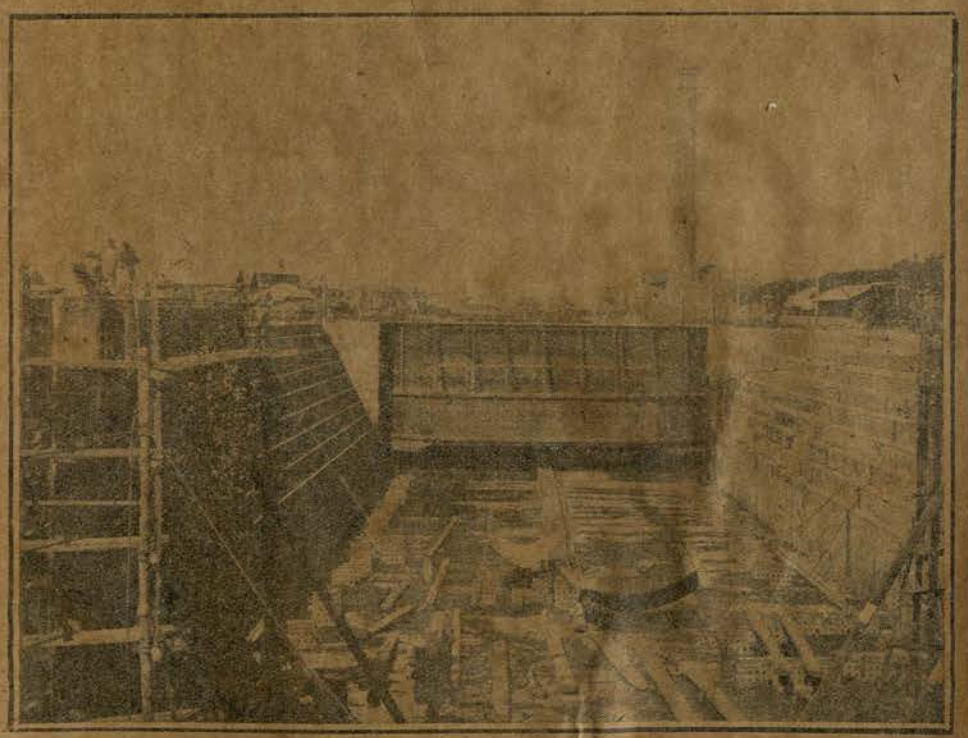
Dredging of the Port.

Dredging forms a most important and costly item in the work of the Port. In addition to constant maintenance dredging of the Docks, Bunders and channels, the existing dock approaches and Harbour Wall berths are being deepened to 28 feet at Lowest Ordinary Spring Tides, and the mail steamer berth to 32 feet. The dredging fleet includes nine large modern Dredgers of various types, nine Steam Hopper Barges and a Rock Breaker, with the usual attendant barges.

The Workshops.

The Trust has its own Workshops for carrying out repairs to its plant (Hydraulic, Railway, Electric, etc.) and flotilla of dredgers, tugs, etc. The Workshops are equipped with modern machinery and give employment to about 3,500 men.

THE NEW MOLE STATION AT BALLARD PIER. [Special Photo.



THE HUGHES DRY DOCK. [Special Photo.

Hydro-Electric Power for Bombay Factories.

INDIA possesses sufficient water power in various districts which is now being utilised for industrial purposes. The first Hydro-electric Installation of which we have information was carried out in 1896 for the Darjeeling Municipality by Messrs. Crompton & Company, Ltd., Chelmsford. Previous to this, in 1875, Mr. J. N. Tata realised the advantages of water power and applied for a concession for utilising the water falls near the Marble Rocks at Jubalpore. The concession was not allowed but his early investigations stimulated further enquiries which were continued by Mr. David Gostling and others in districts within easier reach of industrial centres.

If Bombay is favourably situated as a centre of industrial activity, she is equally fortunate in the possession of those economical sources of power supply, which have contributed to the success of electrical undertakings in other countries. In an editorial in the *Indian Textile Journal* for September 1899, Mr. John Wallace, C.E., indicated the prospects of water power from the ghauts near Bombay as under :—

"The progress made in the economy of transport of electric current brings us each year nearer the time when the power of falling water in the Ghauts on the other side of Bombay harbour will be utilised in our city for industrial purposes. The rainfall of the hill-tops during the five months monsoon varies from 200 to as much as 400 inches, and the highest summit in our district is 4,700 feet above the level of the sea. It would be necessary in order to utilise the rainfall for industrial purposes to make storage reservoirs in upland valleys to provide a water supply during the seven dry months of the year, and the conformation of the valleys would have to be such that the cost of the dam or bund should not be excessive. . . .

"The impounding of water in the upper valleys of the Ghauts may be regarded from the double point of view of motive power and agriculture. During the rains more power runs to waste in the thousands of waterfalls among the Ghauts than would supply every factory in the Presidency with power the year through. It would light our cities, propel our tramcars, pump our sewage, load and unload our ships, propel hundreds of electric motor cars, pull all our punkhas and do a large proportion of domestic labour. Electricity has hitherto led a rather precarious existence in Bombay for reasons which our limit of space forbids us to enter into, but we venture to think that, with the enormous resources of force that are wasted within sight of our city, the electrical engineer may look forward to a period of intense activity and of prosperity."

This period has happily arrived with the operations of the great hydro-electric works which the house of Messrs. Tata Sons, Ltd., have projected for the advancement and economical working of the industries and factories in the city and suburb of Bombay.

The Tata Hydro-Electric Work at Lonavla.

History of the Project.

THE late Mr. David Gostling, one of the best known architects of this city, conceived the idea of utilising the heavy rainfall on the Bore Ghauts for industrial purposes in Bombay. There was one citizen who could appreciate the suggestion and carry it through, and that was Mr. Jamsetji Tata. With characteristic thoroughness he made a minute study of Mr. Gostling's initial proposals, developing them eventually into an extended project, which was to place the spinning and weaving mills of this city on a higher level of economy.

Of all the schemes—and there were many—which Mr. Jamsetji Tata had conceived or adopted, the electrification of the Bombay factories was as precious to his heart as the manufacture of iron and steel, and when death suddenly removed this great pioneer of industries on May 19th, 1904, the work of completion devolved on his sons.

The project was, however, too large to be handled without substantial financial aid and expert advice, the capital being roughly estimated at over a million and a half sterling if the full requirements of the local mill industry were to be met. A syndicate consisting of Messrs. Tata and other financiers was formed in 1905 and registered in London as the Bombay Hydro-electric Syndicate, Limited. Messrs. David Gostling, Robert Miller, James Brown and Edward Miller, joined the Syndicate, which appointed Messrs. Alfred Dickinson and Co., of London and Birmingham, its Consulting Engineers and general advisers.

Engineering Investigations and Surveys.

The next step was to verify and develop Mr. Gostling's original propositions in connection with the hydraulic works, and to enquire into the general prospects of the scheme. Accordingly Messrs. Dickinson sent out in 1905, Dr. John Manheim, an electrical expert, to make careful enquiries into the engineering and commercial aspect of the undertaking, while Mr. R. B. Joyner, C.I.E., M.I.C.E., was engaged to make special investigations in connection with the hydraulic part of the project. Mr. Joyner had rendered valuable services for nearly 30 years, in the engineering department of the Government of Bombay. His unique experience of water-works and large engineering projects including the Gokak Falls, and his intimate knowledge of the districts near Lonavla, proved of great value to the promoters, and it was gratifying to Government that a retired member of the Public Works service was associated in this important undertaking.

Mr. Alfred Dickinson, M.I.C.E., M.I.E.E., M.I.M.E., was retained as Consulting Engineer for the scheme as he had from its initial stage taken an active part in its development. His experience of electical power plants had been considerable. For nearly ten years from 1884 he was chief engineer and general manager of the largest mechanically worked tramway system in Europe and commenced an independent practice from 1893. Since then his advice had been sought for large and varied engineering projects in all parts of the world from Cuba in the West to Tokio in the East, and he had carried out important works in Great Britain, Ireland, Spain, France, South Africa, China, Straits Settlements, and other countries in connection with civil, mechanical and electrical undertakings. Consequently his accumulated experience of many years proved of great value in the completion of the Tata Hydro-electric Works.

THE TATA HYDRO-ELECTRIC PROJECT: DIAGRAM OF THE DISTRICT.
(As published in the *Indian Textile Journal* in 1912.)

Guarantee for Advance Contracts.

It was in 1906 that the investigations of Dr. Mannheim and Mr. Joyner were completed and the project possessed all the elements of success from the engineering point of view. Scarcely, however, a mill in India had then been electrified and engineers in charge of the most successful of cotton mills in Bombay expressed themselves openly against the electric drive. The general ignorance of the subject on the part of millowners and managers and the rival interests of steam power, considerably prejudiced the prospects of the electrical energy. There was also the question of the removal of costly steam plants to make room for the electric motors to the extent of 30,000 H.P. which the Hydro-electric project proposed to supply at the initial stage or a total of 60,000 H.P. when the works were extended. Consequently, with few exceptions, Bombay millowners were not inclined to encourage the Tata scheme but preferred to wait and watch the practical results of the electric drive in any of the local factories which chose to undertake the transformation. This necessarily delayed the project by hampering Messrs. Tatas' negotiations with financiers and investors. Would the output of power under the Hydro-electric License find a market or would the scheme have to withstand the prejudice of millowners and suffer by conflicting interests and opposition? During this anxious period Messrs. Tata found a colleague in Sir Sassoon David, whose co-operation proved of considerable value. A lengthy correspondence by the leading mill engineers in Bombay against the introduction of electric power had appeared in the *Indian Textile Journal* in whose editorial columns Mr. S. M. Rutnagur had indicated the electric drive as an advantageous and economic proposition. At the same time the information and data which he had obtained in regard to the success of electric power transmission in England and America were placed at the disposal of Sir Sassoon David and those millowners who were anxious to study the subject in the interest of the mill industry. The result was that about the end of 1907 and long before the financial negotiations for forming the Company could be completed Mr. Rutnagur was able to bring about an arrangement with Sir Sassoon David and Sir Shapurji Bharocha who guaranteed to take up a substantial proportion of the energy that would be available from the initial supply of 30,000 H.P. on the starting of the Hydro-electric Works. This guarantee proved a wise precaution on the part of the promoters because when applications were invited for the power supply, Bombay millowners as a body made but a feeble response while the Railways, the Port Trust and other large industrial concerns were not prepared for electrification. The available horse-power was, however, contracted for almost wholly by the guarantors and their friends which secured a very satisfactory start for the Hydro-Electric project. In addition to the guarantee, Sir Shapurji Bharocha was materially influenced by Mr. Rutnagur's advice to help the financing of the scheme by underwriting the whole of the Debenture Stock of Rs. 55 lacs (or £366,000) equal to one-third of the capital required for the Hydro-Electric Power Supply Company.

The Financing of the Project.

The project then wavered between different offers from financiers in London but Messrs. Tata preferred to launch the scheme with Indian capital and in this desire they received the support and goodwill of Lord Sydenham, then Governor of Bombay, who, as an experienced engineer, felt convinced of the success of the scheme and the advantages of electric power supply for the various industries in Bombay. Sir Dorabji Tata rose to the occasion and toured over the different provinces for the financing of the largest hydro-electric undertaking in India and the largest in the world in respect of the enormous quantity of water power that

was to be impounded by the dams. Sir Dorabji's efforts were rewarded; patriotism impelled the native Princes and investors to encourage the project and he could secure enough capital to register the Tata Hydro-Electric Power Supply Co., Ltd., on November 10th 1910 with a nominal capital of Rs. 2,00,00,000 (£1,333,333) divided into 10,000 ordinary and 10,000 preference shares of Rs. 1,000 each.

By August 1911 the whole of the available power was taken up including 26 cotton mills which entered into contracts for 10 years at 0.55 anna per unit, the Tata Company supplying and maintaining the driving plant. The foundation stone for the Lonavla dam was laid by Lord Sydenham on February 8th 1911 before a large and representative gathering of merchants, manufacturers, engineers and officials.

Completion of the Works.

The two lakes, Lonavla and Walwhan, were completed by the end of 1914 and Shirvata by 1919 and have now been renamed Lake Gostling, Lake Sydenham and Lake Willingdon respectively. Power was switched on for the Bombay cotton mills on February 8th 1915 by Lord Willingdon who succeeded Lord Sydenham as Governor of Bombay, and there is scarcely a cotton mill at the present date that is not using the electric current for driving its machinery.

Thus after years of waiting the Tata Hydro-electric Project was completed with a history that has been the history of long periods, of careful study and investigations; of strenuous efforts and heavy outlay indicating the patriotism and vast resources of the Tata family that has contributed so liberally towards India's industrial regeneration.

Of the early band of workers Mr. Jamsetji Tata died in 1904 and Mr. David Gostling in 1908; Mr. Millar had retired from the country and the responsibility of the work lay principally on the shoulders of Sir Dorabji Tata who persevered in his work with the help of Mr. B. J. Padshah and Mr. A. J. Bilimoria. The scheme reached its critical stage during the latter part of 1909; the opportunities that were offered had to be carefully considered and followed up even at the risk of failure. For years Sir Dorabji had devoted himself to the completion of the great work his father had undertaken; he rose to the occasion and had the satisfaction of putting the scheme through with the prospects of success fully assured.

Scarcely a project of any industrial importance in India has been started under the same favourable conditions; every unit of the power that was to be available and every rupee of the large capital, was taken up before a stone was laid at Lonavla. The construction of the extensive reservoirs with their dams and ducts, the pen-stocks and pipe lines, the power house and receiving stations and the steel towers and cables extending over a distance of 43 miles are now in working order and Sir Dorabji Tata has the satisfaction of completing the work which his father had begun for the betterment and prosperity of the industries of this great city.

The Hydraulic Works at Lonavla.

Lonavla, the well-known hill station on the summit of the Bhor Ghats, is the site for the reservoirs, which store water during the rainfall estimated to average 175 inches, thus ensuring a continuous supply for the Generating Plant 2,000 feet below. The three lakes have been formed by constructing masonry dams across the Lonavla, the Walwhan and the Shirvata valleys.

Lake Gostling is supplying power during three months of the monsoon, and is large enough to hold sufficient water during the longest breaks in the rains. Its area approximates 1,000 acres formed by a low dam 3,600 feet long and holding up 26 feet depth of water with a roadway over it and two waste escapes, one leading to the Bay of Bengal and the other to the Indian Ocean. Its capacity is 400 million cubic feet.

THE WALWHAN DAM, LONAVLA.

THE SHIRVATA DAM, LONAVLA.

THE TATA HYDRO-ELECTRIC POWER SUPPLY.

Lake Sydenham is a storage reservoir to serve for the rest of the year. It is situated near the Walwhan village about 1¼ miles from Lonavla station, and is formed between two spurs of hills by a dam 4,500 feet long, and about 70 feet high. The area of the lake is nearly 1,540 acres, or about 2½ square miles, and its capacity 2,600 million cubic feet. The dam is of solid masonry fitted with sluices to control the water supply to the Duct leading to the Forebay at the edge of the precipice.

Lake Willingdon was constructed in a valley beyond Sydenham lake, with which it is connected by a tunnel nearly a mile long, running through the dividing ridge of steep hills, which form the watershed some 1,200 feet above the level of the valley. This lake is also held up by a large masonry dam, 7,670 feet long, its greatest height above the foundation being 93 feet, thus forming a very capacious reservoir for nearly 7,000 million cubic feet of water, with an area of nearly 5 square miles.

The Course of the Water.

The water from Lake Sydenham is led to the edge of the Ghauts near Khandalla, through a masonry Duct, running first across a level plain, then crossing rough ground, across ravines and deep water-courses, over the Bombay-Poona Road and the G. I. P. Railway, through stone aqueducts and tunnels to the Forebay, traversing an aggregate distance of nearly four miles. Arrangements have been made to lead the water from Lake Gostling to the Duct during the monsoon. The Forebay is situated 2,040 feet above sea-level, and the water from it enters pipes seven feet in diameter which run a distance of nearly 12,500 feet, down the steep slopes and precipices, dividing out in their descent and passing through a tunnel under the Reversing Station and down the cliff into the valley below, to Khopoli, where the Power House has been built. The head is a little over 1,730 feet, or ten times as great as that of Niagara, the static pressure being 750 pounds per square inch.

The Power House.

The Power House has been erected near the Railway Terminus at Khopoli, on a spot nearly 300 feet above sea-level, which allows of the tail-water being utilised for industrial and other purposes. It is fitted with Turbo-generators and electrical plant of the most modern type that have been in successful operation in large hydro-electric power stations on the Continent and the United States, and include six main sets of Hydraulic Turbines of the Pelton or Impulse type. Each Turbine is coupled direct to Generators (three-phase) giving 8,000 Kilowatts at normal full load. There are also two auxiliary sets of Hydro-turbines direct-coupled to Generators of 850 H.P. capacity to supply direct current for the excitation of the main three-phase sets and to furnish power to the Station motors, lighting and accumulator circuits. The main Turbines have been designed to run at 300 R.P.M. and the Exciter sets at 600 R.P.M.

The Receiving Station in Bombay.

Electricity is generated at a pressure of 5,000 volts and is raised by Transformers to 100,000 volts at which pressure the current is conducted to Bombay by high tension transmission wires supported on a line of steel towers. The length covered by the wires, from Generating to Receiving Station is 43 miles, while the railway distance from Khopoli to Bombay extends to 70 miles.

The Receiving Station in Bombay is located at Parel with the distributing and sub-stations in close proximity to the cotton mills the current being supplied through underground cables at a pressure of 6,600 volts.

The three lakes provide power equal to 50,000 i.h.p. for 3,600 working hours yearly.

THE LATE MR. DAVID GOSTLING, F.R.S.A.

MR. R. B. JOYNER, C.I.E. M.I.C.E.

MR. ALFRED DICKINSON, M.I.C.E., ETC.

MR. H. P. GIBBS, M.I.E.E., ETC.

Contracts for the Works.

The construction of the Lonavla and Wahlwan reservoirs and duct lines was entrusted to Messrs. Pauling and Company, of London. The pipe lines and pen stocks were supplied by Messrs. Escher Wyss and Company, Zurich, as also the Turbines coupled direct to Generators by Messrs. Siemens Brothers Dynamo Works, London. Messrs. The General Electric Company of New York secured the order for the 100,000 volts Transformers. The Insulators (100,000 volts) and Steel Towers for the transmission lines from Khopoli to Bombay (43 miles) were supplied by Messrs. Bullers Limited of London, and the copper Conductors by Messrs. Felton and Guilleaume Cable Works. The plant at the Receiving Station was supplied and fitted by Messrs. The General Electric Company of New York, the underground cables and distributing mains being furnished by Messrs. The Callenders Cable and Construction Company, Limited, London.

The total cost of the works at the time (1912) was as under :—

	£
Hydraulic Works including Duct Lines	2,70,000
Pipe Lines and Pen stock	99,000
Turbo generators and excitors	27,000
Transformers for Power Station	11,000
Switch gear for Power Station	12,000
Steel Towers and Transmission Line	34,500
Transformers for Receiving Station	11,000
Switch gear for Receiving Station	17,000
Underground Cables and Mains	65,000
Electrical equipment of mills (estimated)	80,000
Buildings for Generating and Receiving Stations ..	20,000
Sundries	3,500
Total ..	£6,50,000

Electrical Expert and General Manager.

Mr. H. P. Gibbs, M.I.E.E., New York, M.I.E.E., London, was appointed General Manager and Electrical Expert of the Tata Hydro-Electric Company, and a more capable officer could not have been selected for the post. Brought up in a country that has given the world some of its best talents in electrical science and engineering, Mr. Gibbs had been able to obtain wide and varied experience of electrical undertakings of all kinds. As consulting expert his advice had often been sought to rectify errors and derangements in the erection and working of complicated machinery and plants which necessarily developed his resources to act in emergencies and qualified him for more important responsibilities. In 1899 Mr. Gibbs went to Mexico and installed a large mining plant complete in every respect, and two years later he came out to India as Chief Engineer for the Kolar Gold Mines Electrical Installation, at Mysore. Early in 1903 he was placed in entire charge of the Cauvery Power Scheme with the success of which his name has been intimately associated, and subsequently as Chief Electrical Engineer to the Government of Mysore, he designed and carried out several schemes including an electrical winding plant, one of the most important the world has seen. The choice of an expert for large undertakings in India has often been a matter of difficulty, as the special conditions of climate and labour have to be reckoned along with technical and trade peculiarities. Mr. Gibbs combines the highest qualifications of an electrical engineer with the practical knowledge and experience of Indian requirements which have contributed materially to the successful working of the various hydro-electric works under the management of Messrs. Tata Sons, Ltd.

Further Extensions for Hydro-Electric Power Supply.

The numerous advantages of the electric drive, apart from its economy, brought further enquiries for power supply from the Bombay millowners and other large consumers. This was about the year 1913 when the three original reservoirs at Lonavla were not even completed. The work of surveying and selecting a new and suitable valley devolved this time on Mr. H. P. Gibbs, who had up till then been mainly responsible for the successful erection and operation of the generating plant and the cable transformers and all other machinery that had been installed at the Tata Hydro-electric Works. Mr. Gibbs found the Andhra valley, about 12 miles to the north of Lonavla, which could be utilised for storing nearly 17,000 million cubic feet of water. The project was taken in hand by Messrs. Tata in 1916 by forming the Andhra Valley Power Supply Co., Ltd. These new works were designed to generate 60,000 H. P., the cost of the scheme being Rs. 3½ crores.

Even this supply was found to be insufficient for the increasing demand for electrical energy not only by the cotton mills but by the railways and the Bombay Tramways and Electric Supply Company and other consumers. A third scheme, *viz.*, the Tata Power Company, was therefore taken in hand by Messrs. Tata. The new site was also discovered by Mr. Gibbs and lies about 25 miles to the west of Poona. A dam has been built across the junction of the rivers known as Nila and Mula. This dam is 150 feet in height and 3,600 feet long, and will form a lake 16 square miles in area. The outlet from the lake will be at Davdi, where an electrically driven tunnel, 3½ miles long, will lead the water to the high-pressure pipe-lines at a point about 1,700 feet above the power station at Bhira. Thence the power will be conveyed, along three lines of steel trestle towers, to Bombay, a distance of 76 miles. At the present time electrical equipment of 150,000 H.P. is being installed, and will be increased eventually to 180,000 H.P. The new works are expected to be completed shortly. Meantime a description of the electric plant and works of the Andhra Valley Power Supply Company will prove of interest.

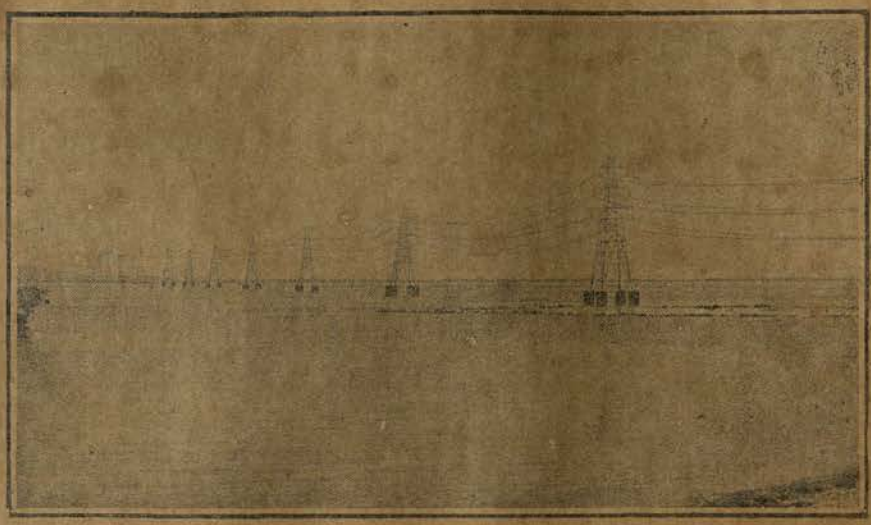
The Works of the Andhra Valley Power Supply Company.

This scheme embraces the generation of 60,000 kVA by water power with transmission over 56 miles at 100,000 volts and distribution in bulk to cotton mills and other consumers in Bombay. The water storage is located on the table lands of the Western Ghats which lie about 2,000 feet above sea level. The average rainfall over the catchment area of 48 square miles during the past 45 years has been about 105 inches and the maximum 142 inches. The rain water is stored in a reservoir about nine miles long and four miles wide, covering an area of 11 square miles, formed by throwing a masonry dam across a narrow neck of the valley.

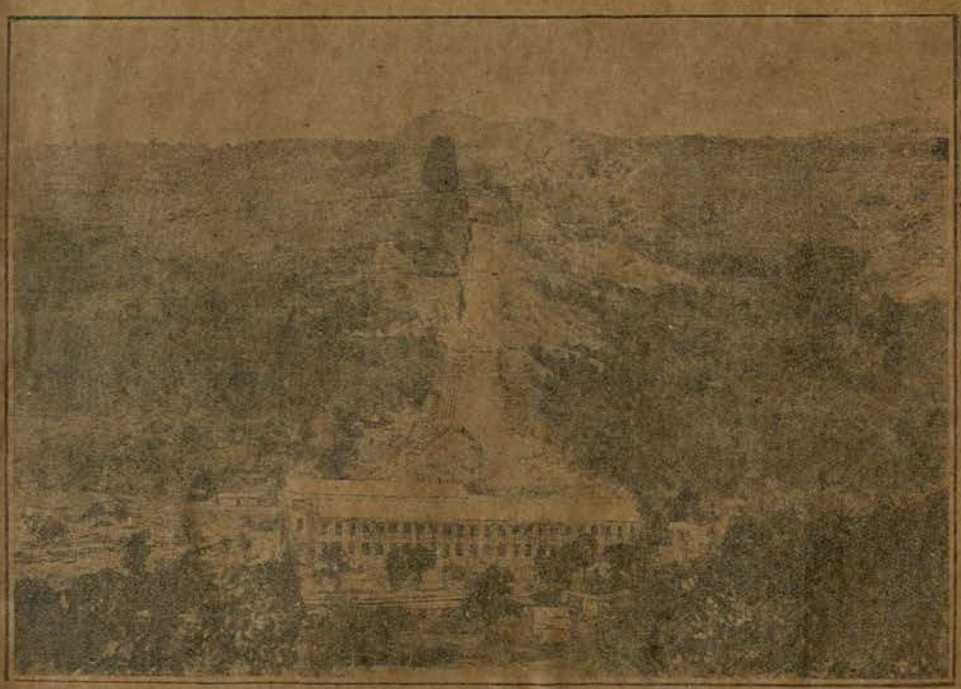
Special Construction of the Dam and Tunnel.

The dam is constructed of rubble masonry faces with a hearting of concrete and has a waterproof diaphragm toward the upstream side composed of cement, sand and a special waterproofing material. The length of the dam on top is 1,500 feet, it is 190 feet high above foundation level and carries a roadway 10 feet wide. The total contents of the dam are seven million cubic feet.

A peculiarity of this hydraulic development lies in the fact that the dam is placed at a lower level of the valley and at the opposite end to that of the drew-off. This difference in level amounts to 112 feet and this depth of water at the dam is therefore not available for use. Of the 190 feet total height of the dam



THE TATA HYDRO-ELECTRIC POWER SUPPLY.
Transmission Lines : Thana Creek.



THE TATA POWER COMPANY.
The Generating Station and Pipe Lines at Bhira.

only the upper 75 feet impounds useful water, the total useful storage being 12,000 million cubic feet of water. As the draw-off level is considerably below the top level of the mountain range, a tunnel is cut through hard trap rock to the point where the steel penstocks commence. This tunnel is 8,700 feet long, approximately 82 square feet in area, has a gradient 0·4 per cent and is lined to decrease friction.

Near the tunnel entrance are installed motor-operated sluice gates and screens, located in one of the shafts used in driving the tunnel, and near the outlet end a surge chamber 15 feet in diameter and of a vertical height of 131 feet is cut through the rock from the tunnel roof to ground level. The outlet of the tunnel occurs in the face of the mountain overlooking the plains 1,700 feet below.

The Penstocks and Pipe Lines.

The penstocks commence with a ten foot diameter steel pipe which extends 40 feet into the tunnel and is grouted throughout this length with cement concrete. The tunnel is enlarged in diameter at this point to allow this work to be carefully done. Thirty feet from the tunnel mouth the 10 foot pipe divides into eight smaller pipes of 42 inches diameter each controlled by a motor-operated gate valve. Six of these pipes run a distance of 4,400 feet to the power house, reducing to 38 inches diameter about half way down and each supplying one turbine. The grade varies up to a maximum of 140 in 100, the pipes being supported above ground on masonry bearers and anchored at each of the 18 points where a change in grade occurs. The pipes vary in thickness between $\frac{3}{8}$" at the top to 1-7/16" at the bottom where they are subjected to a static head of 1,730 feet. The bump type of joint has been adopted throughout the line and expansion joints are provided just below each of the 18 anchor points.

The Power House.

The Power House is built to accommodate 7 units of 10,000 kVA capacity each, of which 6 have been installed and provision is made for extending the station up to a total capacity of 8 units. The electrical equipment consists of six 10,000 kVA Generators, 5,000 volt, 3 phase, driven by 15,000 H.P. Turbines and excited by either of two 600 kW 220 volt water-driven exciters. The generators feed into a 5,000 volt bus and thence to three banks of transformers each consisting of 3 single phase 8,000 kVA 100,000 volt transformers. All transformer banks are connected to a common 100,000 volt bus and both 5,000 volt and 100,000 volt busses have sectionalizing switches. The two outgoing lines to Bombay and tie-line to the Tata Hydro-Electric Co.'s Power House are provided with aluminium lightning arresters.

The Transmission Line.

The transmission line to the receiving step-down station in Bombay is 56 miles long and for the present consists of a double circuit carried on one line of towers. The conductor is of standard copper cable of ·005 square inch, supported on suspension insulators, 6 in suspension and 7 in strain. The towers are spaced 500 feet apart and carry one earth wire. The spacing of conductors is 10 feet and the bottom conductor is 25 feet from the ground making the towers 63 feet high for anchor and 68 feet for suspension. For special work over navigable creeks the towers are set on trestle bases raising them to 98'. The towers were designed and manufactured by the Company.

The Power House and Receiving Station are each capable of being tied in on the 100,000 volt side by transmission tie-lines of 19 miles and 7 miles in length respectively to the Tata Hydro-Electric Company.

A telephone line is carried on 25 foot reinforced concrete poles, 16 feet from the transmission towers. Should a second line of towers be erected, the telephone line will be midway between the two.

The Receiving Station.

The receiving step-down station is located on the north extremity of the Island of Bombay, and the equipment is very similar to that at the Generating Station and provides for twenty 22,000 volt feeders leaving the station. Two 12,500 kVA 22,000 volt Rotary Condensers which are used only for improving the power factor of the system are an interesting feature.

The feeders consist of 3-core, paper insulated, lead covered cables laid underground in earthenware troughing filled with bitumen. Each feeder supplies three or four consumers equivalent to a total of about 5,000 E. H. P. The largest copper section used in feeders is .2 square inch per conductor and this is graded down as consumers' taps are taken off to .05 square inch. An auxiliary emergency supply feeder is connected to each consumer to provide for continuity of supply. Feeder taps are made in the mill sub-stations and by means of removable links across the cable ends which are brought out in trifurcating boxes.

The Mill Consumer's Fittings.

Each of the 40 odd consumers in Bombay is fed from a mill sub-station located on his premises. This building accommodates the incoming 22,000 volt feeders, feeder oil switches, high tension bus, power transformers, low tension bus and motor circuit oil switches. The power transformers, 3 phase, 22,000 to 2,200 volts, range in capacity from 500 to 900 kVA and are used in groups of one to four in parallel. Each motor circuit controls several motors, the distribution being through three-core underground cables to the various departments of the mill. The motors are all of the slip ring, induction type and range from 50 to 500 H.P. The 50 to 175 H.P. have a speed of 365 r.p.m. and the 200 to 500 H.P. 290 r.p.m. All motors are designed for direct drive from either or both ends of the shaft through a semi-flexible coupling. The motors are controlled by pillar switches and liquid starters located near the motors. The majority of cotton mills adopt a combination of direct drive and rope pulley reduction for their main shafting, while a few use gear reduction or individual motors instead of group drives.

The Rates for Electric Supply to Cotton Mills.

Rates charged by the Tata Hydro-Electric Power Supply Co., Ld :—

(a) *Under Old Contracts (still current):—*

.485 anna per unit without the Company's equipment.
.5 anna per unit with the Company's transformer equipment and the Consumer's motor equipment.
.535 anna per unit with the Company's motors and Consumer's transformer equipment.
.55 anna per unit with the Company's motor and transformer equipment.

(b) *Under revised Contracts newly made :—*

.65 anna per unit for power only.
.675 anna per unit for power and transformer equipment.
.7 anna per unit for power and motors.
.725 anna per unit for power and complete equipment.

Rates charged by the Andhra Valley Power Supply Company :—

.725 anna per unit for power only.
.8 anna per unit for power and transformer equipment.
.9 anna per unit for power and complete equipment.

The Electrification of Bombay Cotton Mills.

The following Cotton Mills are supplied with electric current from the Works of the Tata Hydro-Electric Power Supply Company :—

Apollo Mill.
Alliance Mill.
Bombay Cotton.
Bradbury Mill.
Crescent Mill.
Colaba Land Mill.
Crown Mill.
David Mill.
Diamond Mills (Toyo Podar).
Dawn Mill.
Ebrahim Pabaney Mill.
Fazulbhoy Mill.
Finlay Mills.
Globe Mills.
Gold Mohur Mill.
Jamshed Mill.
Jubilee Mill.
Kastoorchand Mill.
Kohinoor Mill.
Mathradas Mill.
Mohomedbhoy Mill.
Madhowji Dharamsi.
Morarji Goculdas.
New Great Eastern.
New City of Bombay.
Phœnix Mill.
Pearl Mill.
Ruby Mill.
Standard Mill.
Swan Mills.
Swadeshi Mill.
Sir Shapurji Broacha.
Simplex Mill.
Tata Mill.
Union Mill.
Western India.

The following Cotton Mills are supplied with electric current from the Works of the Andhra Valley Power Supply Company:—

Alexandra Mill.
Bomanjee Petit.
Century Mill.
Crown Mill.
David Mills.
E. D. Sassoon Mill.
Edward Sassoon Mill.
Fazulbhoy Mills.
Finlay Mill.
Globe Mill
Gold Mohor Mill.
Hindoostan Mill.
Jacob Sassoon Mill.
Kohinoor Mill.
Kilachand Mill.
Morarjee Goculdas.
Moon Mill.
Mathradas Mill.
Meyer Sassoon Mill.
Madhowji Dharamsey.
Madhorao Scindia.
New Kaiser-I-Hind Mill.
New Apollo (Howard & Bullough).
Premier Mill.
Pearl Mill.
Rachel Sassoon.
Sassoon Spinning Mill.
Simplex Mill.
Sassoon Turkey Red Dye Works.
Sir Shapurji Broacha.
Western India.

All the electrical equipments on the mill premises which belong to the Tata Supply Companies are motors, transformers, meters and their necessary switches, etc.

In addition to the supply to the cotton mills, power is also taken by various flour mills, ice factories and by the Bombay Tramway and Electric Supply Company and the G. I. P. and B. B. & C. I. Railways for which class of consumers a 24-hour service is maintained.

THE OLD BUILDING: 1889 TO 1923.

THE NEW BUILDINGS ERECTED AT MATUNGA IN 1923.

THE VICTORIA JUBILEE TECHNICAL INSTITUTE, BOMBAY.

The Victoria Jubilee Technical Institute.

STARTED in April 1889, the Victoria Jubilee Technical Institute inaugurated a distinct departure for the training and education of the youths of this country. Schools had been established for students who aspired largely for clerical work in Government and mercantile offices, while the medical colleges and law classes turned out a sufficient number of candidates for the higher professions. The time however arrived when the supply in almost every line of the popular professions seemed to be outgrowing the demand. On the other hand, the textile and allied industries were making headway particularly in Bombay city and Presidency where iron works and foundries were on the increase in addition to the extensions in railway workshops, the shipping docks and in other engineering establishments whose plant and machinery required skilled labour and supervision. There were hundreds of fitters and turners who had to take to workshop life without any systematic training or education, but those who had the natural aptitude and physique for mechanical work could earn better wages than the office head clerks and assistants and even school teachers and graduates. The salary of a carding master in a cotton mill often exceeded the income of a district Pleader or a Licentiate in Medicine while a mill manager, without any University degree, could secure a higher salary than the Judge of the Small Causes Court. With all this, the life in a cotton mill or a workshop was looked upon as inferior and humiliating for the sons of the better class families and it was only when a youngster lagged behind in a school or college that he was relegated to a mill or factory. This proved a blessing in the case of those whose brains and inclinations were not adapted for the voluminous reading and hard study which brought University degrees with the bare prospects of earning a living in the overcrowded professions.

The Training of Mill Apprentices.

The training of a cotton mill apprentice in those days depended upon the good-will of a friend or relative employed in the factory, and in the case of the sons of rich parents, the manager or engineer was paid a fee for a course of training for two or three years. Half the amount was to be paid in cash at the start and the balance when the apprentice passed the examination which was held by two other mill managers or engineers. Carding and spinning was usually taught for the sum of Rs. 2,000 while Rs. 3,000 were charged for carding, spinning and weaving, engineering being always considered a separate branch outside of the qualifications of a mill manager except in rare cases. Messrs. Tata Sons had also arranged for the training of apprentices in the mills under their management on advantageous terms and with a monthly allowance with prospects of employment under them. This system of instruction and the training by mill managers and engineers in the mill itself have turned out many good men who have made their mark as successful mill managers and in other responsible posts.

The Formation of a Technological Institute.

However, a Technological Institute, as distinct from the Arts Colleges, was an obvious necessity and appealed very forcibly not only to technical experts like Mr. Nowrosji N. Wadia and Sir George Cotton and veteran merchants like Sir Dinshaw Petit and Sir Frank Forbes Adam but it received every encouragement even from prominent lawyers and politicians like Sir Pherozshaw Mehta, Justices Telang and Ranade and other well-known citizens who had scarcely seen the inside of a cotton

mill or an engineering workshop. Thus the Victoria Jubilee Technical Institute started on its useful career under the guidance and good will of men of varied qualifications and attainments including millowners, merchants, technical experts, lawyers, physicians, mill managers, civil and mechanical engineers, officials and heads of the educational and Government departments. Mr. N. N. Wadia, C.I.E., contributed the best of his time, energy and expert knowledge of textile and engineering factories, while Sir Dinshaw Petit, the First Baronet, gave the handsome donation of Rs. 3,00,000 for the building; the Royal Jubilee Fund contributed Rs. 35,000; the Sir Jamsetji Jeejeebhoy (2nd Baronet) Memorial Fund brought in Rs. 46,000; and the Ripon Textile School connected with the Institute was endowed with Rs. 1,50,000 from the Ripon Memorial Fund.

The Textile Machinery.

Messrs. Platt Brothers & Co., Ltd., of Oldham, presented a special and complete set of cotton spinning machinery for the Ripon Textile School. It is to be noted that Messrs. Platt were the first to supply machinery to the pioneer cotton mill in India in 1854 and they also equipped in 1889 the pioneer Technological Institute in the country with textile machinery which has materially helped towards the success of the Institute in the training of mill managers and overlookers.

The Pioneer Technological Institute in India.

A new and wider field was thus opened out for Indian youths who preferred the healthy life of a Technological Institute where the body and brain worked together, tending towards the development of both, as against the sedentary life and hard studies which were undermining the constitution of many students in the Arts Colleges with decreasing prospects of success in after life.

The objects for which the Institute was established were to impart instruction in the principles of science and art, and their application to industrial or other purposes and to improve the status and position of such persons as may acquire proficiency in these principles and their application, and generally to advance technical education in the Bombay Presidency.

The management of the Institute was vested in a Board of Trustees, consisting of representatives of the Bombay Government, the Bombay Municipality, the Ripon Memorial Fund, the Bombay Millowners' Association, and the Sir Jamsetjee Jeejeebhoy (Second Baronet) Memorial Fund. The Institute is maintained from grants made by the Bombay Government, the Bombay Municipality and the Bombay Millowners' Association, and from interest on investments, fees from students, proceeds of sale of students' work, etc.

The Institute was located at Byculla in the buildings given by Sir Dinshaw Petit, the first Baronet. These buildings however, became, in time, insufficient to accommodate the students and in 1917 the foundation stone of a new main building was laid at Matunga by His Excellency Lord Willingdon, Governor of Bombay, which was formally opened by His Excellency Sir George Lloyd on November 14th, 1923.

The Progress of the Institute: Successful Students.

The progress of the Institute since its establishment in 1889 has been satisfactory despite the difficulties it had to encounter as the pioneer undertaking of its kind. The errors and omissions of the early years in regard to the standard for admission and the courses of instruction have been got over and the Institute has been able to fix upon its programme for the training that is suitable for the present requirements of the industries and factories.

There are many textile factories, electrical and engineering works and other industrial establishments where the passed students of the Institute have found remunerative employment. And the Institute has also reason to be proud of many of its students who have not only been able to secure well-paid and responsible posts but have kept up the good traditions of a Technological Institute as Heads of industrial concerns and as owners of factories and workshops, and as teachers not only in their own *Alma Mater* but in the Technical Schools which have been started in different parts of the country.

It has not been possible for the author to collect information regarding students who are now employed in different parts of the country and whose careers have been particularly noteworthy after passing out of the Institute. A list of the former students of the Institute, who are now serving in the Bombay cotton mills, with which the present publication specially deals, is given on the following pages with a brief reference to Messrs. F. E. Bharucha, V. A. Fernandez and P. N. Mehta, three of the most successful of the Victoria Jubilee Technical Institute students.

The Principals of the Institute.

The Principals who have been in charge of the Institute since its commencement have possessed different qualifications as specialists in their respective professions. Mr. J. P. Phythian, the first Principal, was a Civil Engineer and was formerly Headmaster of the Oldham Technical School. Mr. Hugh Monie, who succeeded him, was Cotton Master in the Ripon Textile School, while Mr. T. S. Dawson, who came next, was a mechanical engineer with considerable practical experience of foundries and workshop practice. The present Principal, Mr. A. J. Turner, possesses the highest qualifications in technical and applied chemistry, while Mr. G. W. Burley who has served as Acting Principal, is also a highly qualified mechanical engineer and technical expert. The Institute has thus been in the hands of Principals with varied experience and qualifications which have contributed to its success in every department.

The Honorary Secretaries.

The responsible position of Honorary Secretary to the Institute was held by Mr. N. N. Wadia, C.I.E., for ten years, from 1889 till 1899, and by Khan Bahadur M. C. Maruzban, C.I.E., for one year in 1900. Dr. N. A. F. Moos acted for eight years, from 1900 to 1908, being succeeded by the Hon. Sir Dinshaw Wacha who carried on the work for nearly 15 years and till his retirement in 1923.

MR. J. P. PHYTHIAN, C.E.,
1888 to 1896.

MR. HUGH MONIE,
1896 to 1905.

MR. T. S. DAWSON, J.P., M.I. MECH. E.
1907 to 1920.

MR. A. J. TURNER, B. SC. (Lond.), F.I.C., F.U.S., J.P. Appointed in 1920.

MR. G. W. BURLEY, B.SC. (Lond.) WH. EX., M.I., MECH. E., M.I.E. (India), MEM., A.S.M.E. (Acting in 1926.)

PRINCIPALS OF THE VICTORIA JUBILEE TECHNICAL INSTITUTE.
(Dr. John E. Mackenzie was Principal from 1905 to 1907.)

Courses of Instruction.

The instruction given is of such a character as to be of the greatest practical value, and covers such ground that a student, after completing his course, will have had a sound and comprehensive education, including both the theoretical and practical sides of the profession he has selected. The management does not undertake to teach trades, but to give such instruction in practical work as will enable the student to make much more rapid progress after leaving the Institute and ultimately attain a higher position than he would otherwise be able to secure.

The following are the courses of instruction qualifying for the Diploma and Certificate :—

(A)—Mechanical Engineering. (B)—Electrical Engineering. (C)—Textile Manufacture. (D)—Technical and Applied Chemistry (including courses in (*a*) Manufacture of Paints and Varnishes ; (*b*) Oils and Fats ; (*c*) Soaps and Candles ; (*d*) Sizing, Dyeing and Bleaching ; (*e*) Food, Drugs and General Analysis). (E)—Sanitary Engineering and Plumbing.

Each of the courses extends over four years, during the last year of which six months of outside work is provided, after which students return for their final examination. Inquiries are received from time to time from owners and managers of factories, mills, and workshops, for past students of the Institute who find no difficulty in obtaining remunerative employments.

First, Second and Pass Class Technological Diplomas and Certificates are given on the results of the final examinations.

Diplomas—(A)—L.M.E. or Licentiate in Mechanical Engineering. (B)—L.E.E. or Electrical Engineering. (C)—L.T.M. or Textile Manufacture. (D)—L.T.C. or Technical Chemistry. (E)—L.S.E. or Sanitary Engineering.

Mechanical Engineering Course.

This course is of 4 years' (8 terms) duration and comprises instruction in Machine Drawing, Applied Mechanics, Physics (Heat, Electricity and Magnetism), Practical Mathematics, Chemistry, Steam and Heat Engines, Machine Design, and practical work in the workshops in Pattern-making, Foundry Work, Smithy, Turning, Machine Tool Work, Fitting and Erecting, the working and management of engines, gas, steam and oil, and testing work in the Central Power Station while some practical electrical work is also included, to give sufficient electrical knowledge to enable a man to run a small plant successfully.

The Power Station.

The whole of the Mechanical Engineering Department is driven by a 26 brake horse-power Electric Motor supplied by Messrs. Mather and Platt, Ltd., of Manchester. The Central Electric Generating Station comprises a "Babcock and Wilcox" water tube boiler with chain grate stoker, a Marshal Compound Engine with drop valve gear working with superheated steam, a Power suction gas plant and Fielding gas engine for working on Indian bituminous coal, a Robey crude oil engine "Semi-Diesel" type, a Hornsby and a Crossley oil engine and Crossley gas engine. The electric equipment is an 80 K.W. compound wound direct current generator. The daily load is from 80 to 90 indicated horse-power and on occasions even more than this. There is also a 50 horse-power Motor Generator Set. The power station is considered a most important training factor for the Mechanical and Electrical students and a large amount of testing work both with the prime movers and electrical units is carried out by them.

Electrical Engineering.

This course is of four years' (8 terms) duration and comprises instruction in Machine Drawing, Applied Mechanics, Steam Chemistry, Physics (Heat and Electricity and Magnetism), Practical Mathematics and practical work in the Mechanical Engineering workshops and Electrical laboratories in testing materials, instruments, lamps, motors, dynamos, wiring, etc. This department is intended for training men to fill any posts in the electrical industry. Many men are wanted on the operatives staff of power generating stations and supply companies, by private owners in isolated stations, manufacturing and repair works telegraph and telephone authorities, on installation and maintenance work. The training given will enable a man, after some further experience, to take up such posts.

Textile Manufactures.

This course is of four years' (8 terms) duration and includes a considerable amount of Machine Drawing, Applied Mechanics, Steam and Heat Engines and Applied Mathematics which, although not carried so far as in the Mechanical and Electrical section, is still sufficiently comprehensive to cover all requirements. Chemistry, bleaching, sizing, dyeing and finishing are dealt with to a considerable extent, and a department for hosiery and thread making is shortly to be established. The course has been arranged to meet the demands of the mill industry in India, and is intended to give a sound practical and theoretical training to men, who will ultimately become weaving, spinning or carding masters, designers, etc.

Plant and Machinery.

The equipment comprises a full and complete installation of preparation and spinning machinery with all necessary testing apparatus; outside this equipment there are a number of machines of various types on which students are instructed in erecting, levelling, adjusting and carrying out experimental work. Practical weaving and spinning form a very important part of the course, and the testing of fibres, yarns, and fabrics, the structure, dissecting and cost of cloths, the application of design and colour to different makes of cloth; the dyeing and printing of yarn and fabrics; chemistry in its application to the treatment of textile fabrics, and the substances used in sizing; mechanical engineering, and engineering drawing as applied to textile machinery.

The equipment is being greatly extended; in addition to a complete spinning plant, there are hand-looms and about twenty power-looms, of the most recent types; the looms are such as to make cloths of varied character. There are also Winding, Warping, Beaming, Sizing machines, Cotton gins, Hopper bale breaker, Hopper feeder, Porcupine opener, Crighton's opener, Finisher, Scutcher, Revolving flat carding engine, Drawing frame, Slubbing frame, Intermediate frame, Roving frame, Ring spinning and Self-acting mule, Testing, Weighing, Bundling and Grinding apparatus. There are Pickles plain looms, Five-shaft tappet looms with Swiss box-motion, Four-shaft tappet loom, plain silk loom, plain automatic tappet loom. Plain loom with twenty-four shaft cross bordered dobby, Plain loom with forty-shaft dobby, Circular box-motion with twenty-shaft, Plain loom with twenty-shaft leno dobby, Towel loom with positive dobby, Plain loom with twenty-shaft negative dobby, two plain looms with sixteen-shaft dobbies, Eccles box-motion with sixteen-shaft dobby. Wright Shaw's box-motion with 400-hook single lift jacquard, Eccles box-motion with 400-hook double lift single cylinder, Circular box-motion with 400-hook cross bordered jacquard, Plain loom with 400-hook double lift double cylinder jacquard, Card cutting machine and a number of hand-looms with treadles, dobbies and jacquards. Two warp winding machines, Pirn winding, Warping mill, Beaming machine, Yorkshire dressing machine, Sizing machine, and Testing machine for strength, moisture, elasticity of yarns and cloth.

Technical and Applied Chemistry Course.

This course is of four years' (8 terms) duration. Students entering this department undergo a general training in the principles of the subject during the first two years of the course. During this time they attend lectures on inorganic and elementary organic Chemistry and, in the Laboratory, carry out practical work.

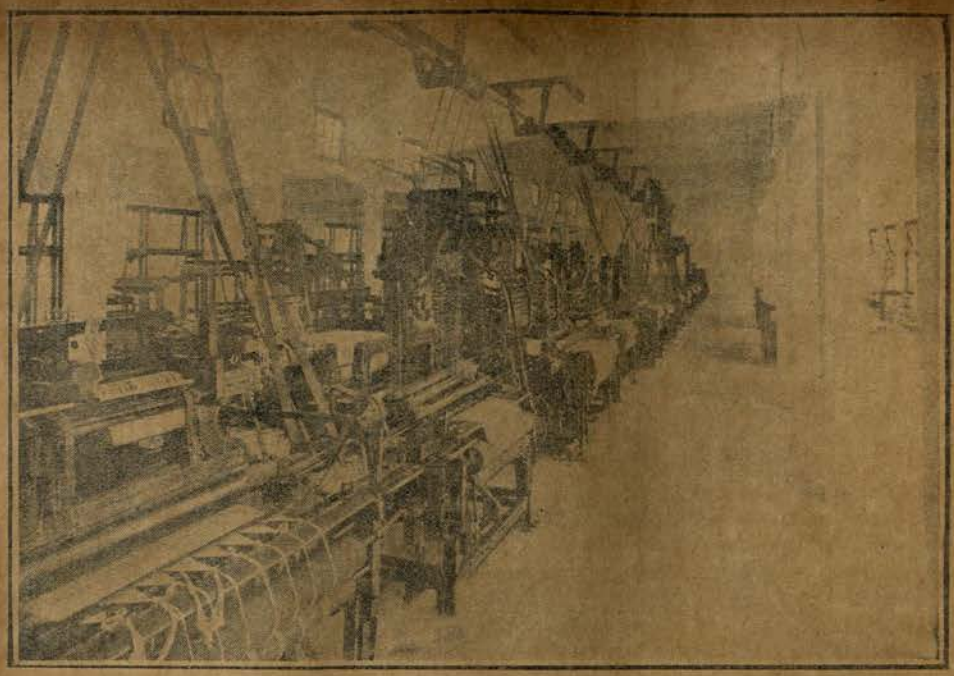
At the end of the second year, the students are allowed to choose one of the following courses:—

(*a*) Oil extraction, purification, deodorisation, etc. (*b*) The manufacture of soaps and candles. (*c*) The manufacture of paints and varnishes. (*d*) Foods and drugs analysis. (*e*) Textile and Tinctorial chemistry.

The object of the first three branches is to train up men who can utilise the raw materials indigenous to India and also to supply an already existing market, which at the present time draws its supplies from abroad. The object of the fourth branch is to train men capable of undertaking a very important duty, namely, the examination and detection of adulteration in the common articles of food, etc. This department is also of use in imparting a knowledge of the chemical principles involved in mechanical and electrical engineering and in the textile industries. For this purpose special courses of lecture and laboratory work are arranged for each of these branches. During the first year all students of the Institute undergo an elementary course of training in this department. In the second and third year there is a course for Textile students in Sizing, Bleaching and Dyeing and one for the Sanitary students suitable for their special requirements. For the Mechanical and Electrical students there is a course of lectures on oils, fuels and flue gases. This subject is treated as far as possible from a practical point of view and students carry out tests on such materials as coal, producer and flue gases and on oils actually being used for lubrication, etc.

Apparatus and Appliances.

The department is equipped with all the general apparatus required for inorganic and organic analysis and also for the preparation and purification of inorganic and organic compounds. There is a complete plant for heating, crushing and pressing seeds for the expression of oil and an oil filter press; a plant for the manufacture of soap and candles; a plant for grinding colour, pug mills, and mixers for the manufacture of paints and varnishes; special apparatus for the analysis of foods and drugs including Centrifugal Machine, a Schmidt and Hænsch Tropical model Saccharimeter, and Schmidt and Hænsch Polarimeter for essential oils, etc., Pulfrich and Abbe Refractometer, a Jean's Oleorefractometer, a Van Heurck Microscope fitted with analyser, polariser, micrometer eyepiece and powerful objectives, two students model microscopes by Leitz for examination of starches, fibres, etc., an Ozonair plant for bleaching oils, yarns, waxes, etc.; a Lovibond Tintometer. The plant for oil examination includes besides the above an Abel Pensky and a Pensky Martin flash point apparatus, and Redwood's and Engler's Viscometers, a Thurston machine for testing oil under working conditions. There is also a Hempel, an Orsat and a Bone apparatus for examining flue, producer and other gases. The illuminating power of gas can be determined by a Bunsen Lethby photometer fitted with a Bunsen disc and with a Simmance Abady flicker head. The heating value of gases can be tested by a Boy's or Simmance Abady calorimeter. There is a Mahler Bomb and a Thomson calorimeter for solid fuel. There is a gravity bell apparatus for determining the density of producer and other gases. There is apparatus for experimental work in Sizing, Bleaching and Dyeing. The department also possesses a comprehensive series of dye-stuffs by various makers.



THE WEAVING DEPARTMENT, 1925.

PRINCIPAL AND HEADS OF DEPARTMENTS, 1929.

Left to right—Sitting:—Mr. G. E. Canham, M.R. San.I., R.P.C., Sanitary Dept. Mr. A. J. Turner, J.P., B.Sc., F.I.C., Chemistry Dept. Mr. Tom S. Dawson, J.P., M.I. Mech.E., Principal. Mr. B. B. Pradhan, M. Sc., A.M.I.E.E., Elec. Dept. Mr. V. A. Fernandez, L.T.M., Textile Dept. Mr. D. S. Tatke, Head Clerk.

THE STAFF : *Standing—Middle Row* :—Mr. N. S. Bhatta, Mr. M. Simpson, Mr. J. C. Mody, Mr. S. K. Gandhi, Mr. A. R. Nissar, Mr. V. B. Chhayya, Mr. N. B. Patel and Mr. J. F. Valladares.

Standing—Back Row :—Mr. V. R. Manohar, Mr. B. Tayabali, Mr. A. F. Cama, Mr. K. B. Padte and Mr. B. R. Agasker.

MR. F. E. BHARUCHA, L.M.E., M.I.M.E., M.I.E.
Director of Industries, Bombay.

MR. P. N. MEHTA, L.T.M.
Gold Medallist, and First Government of India
State Technical Scholar, etc.

MR. V. A. FERNANDEZ, L.T.M.
Head of the Textile Department,
V. J. T. Institute.

SOME PROMINENT STUDENTS OF THE VICTORIA JUBILEE TECHNICAL INSTITUTE.

Sanitary Engineering and Plumbing.

This course is of four years' (8 terms) duration and comprises intruction in Building Construction and Building Drawing, Levelling and Elementary Surveying, Practical and Theoretical Plumbing Work, Practical Physics, Chemistry, Heat, Practical Mathematics, Applied Mechanics, Hydraulics, Water Supply, Hygiene, Drainage, Quantity and Estimating as required in Sanitary Engineering. The course in Plumbing to some extent follows that of the City and Guilds of London Institute and students are eligible to sit for the examination held by that authority. Men with such technical training are required in Water Works, Municipalities, Sanitary Engineering firms, Public Health and other Sanitary Departments.

Additional Technology.

A student who has successfully completed his course in Mechanical Engineering or Electrical Engineering may qualify himself further by going through a four terms' course in another of these departments on payment of the usual fees. He will not be entitled to any scholarship, prize, medal or other award.

The Board of Management, 1926.

The present Board of Management is as under:—

Mr. R. D. Bell, C.I.E., I.C.S., M.A., B.Sc., *Chairman*; Dr. N. A. F. Moos, D.Sc., F.R.S.E., F. I. B.; Sir Currimbhoy Ebrahim, Bart.; Mr. H. H. Bowack, A.M.I.C.E.; Mr. E. M. Hudson, M.I.E.; Mr. H. P. Gibbs, J.P., FEL.-A.M. I.E.E., M.I.E.E., M.I.E. (India); Mr. F. J. Page, O.B.E.; Mr. A. E. Williams, M.I. Mech. E.; Mr. H. B. Clayton, C.I.E., I.C.S., M.A.; Mr. Jehangir Bomanji Petit, J.P.; The Hon'ble Mr. Munmohandas Ramji, J.P.; Sir Jamsetji Jejeebhoy, Bart, K.C.S.I.; The Hon. Sir Dinshaw Eduljee Wacha, Kt.; Sir C. H. Setalvad, Kt., B.A., LL.D.; Mr. Karimbhai Adamji Peerbhoy and Mr. Ratansi Morarjee.

The Staff.

Principal:—Mr. A. J. Turner, J.P., B.Sc. (Lond.), F.I.C.

Mechanical Engineering:—Messrs. G. W. Burley, B.Sc. (Lond.), Wh. Ex., M.I. Mech. E., M.I.E. (Ind.), Mem. A.S.M.E., Head of the Department; B. B. Ranade, L.M.E., Deputy Head; N. A. Maludkar, Chief Assistant, Machine Drawing; E. D'Monte, L.M.E., 1st Assistant, and K. H. Ogale, L.M.E., 2nd Assistant.

Electrical Engineering and Physics:—Messrs. B. B. Pradhan, M.Sc., A.M.I.E.E., A.M.S.T., Head of the Department; A. R. Nissar, E.E., M.A.I.E.E., M.A.S.Mech. E., Deputy Head; N. B. Patel, 1st Assistant; and N. D. Limaye, L.M.E., L.E.E., 2nd Assistant.

Textile Manufactures:—Messrs. V. A. Fernandez, J.P., L.T.M., Head of the Department; J. F. Valladares, Deputy Head; Assistants: B. Tayabali, L.T.M., J. H. Pitale, L.T.M., and V. Panchapagesan, B.A., L.T.M.

Technical and Applied Chemistry:—Messrs. A. J. Turner, J.P., B.Sc. (Lond.), F.I.C., Head of the Department; J. G. Mody, M.A., Deputy Head; V. B. Chhaya, M.A., B.Sc., Assistant, and M. M. Koppikar, M.A., B.Sc., Assistant.

Sanitary Engineering and Plumbing:—Messrs. G. E. Canham, F.I.S.E., M.R. San. I., R.P.C., Head of the Department; Assistants: P. L. Uberoi, L.S.E., A.M.I.S.E., and K. M. Yusuf, L.S.E.

Practical Mathematics:—Mr. B. R. Agaskar, M.A., LL.B.

The Victoria Jubilee Technical Institute.

Trustees who have been Chairmen.

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Colonel G. L. C. Merewether, R.E.	1890–1892
Lieut.-Colonel W. S. S. Bisset, R.E., C.I.E.	1892–1893
Sir George Cotton, Kt.	1893–1899
The Hon. Mr. W. C. Hughes, M. Inst. C.E.	1899–1900
The Hon. Mr. S. Rebsch, M.I.C.E.	1900–1904
The Hon. Mr. G. O. W. Dunn, M.I.C.E.	1904–1909
Mr. H. V. R. Kemball, C.E.	1906
Sir F. L. Sprott, Kt.	1909–1917
Sir Michael Nethersole, Kt., C.S.I.	1917–1920
Lieut-Colonel G. H. Willis, C.I.E., M.V.O., R.E.	1920–1922
Mr. H. F. Knight, I.C.S.	1923

Past Members of the Board.

Mr. C. Chambers, F.R.S.	1887–1888
Mr. F. L. Charles, I.C.S.	1887–1888
Sir E. C. K. Ollivant, K.C.I.E. I.C.S.	1887–1888
Major-General J. H. White, R.E.	1887–1889
Major H. O. Selby, R.E.	1888–1890
Capt. Sir Henry Morland, Kt.	1890–1891
Mr. Badroodin Tyabjee	1888–1892
The Hon. Mr. Justice K. T. Telang, C.I.E., M.A., LL.B.	1888–1893
Mr. Sorabjee Framjee Patel	1888–1894
Mr. H. A. Acworth, I.C.S.	1891–1895
Mr. Framjee Dinshaw Petit	1893–1895
Mr. A. F. Beaufort	1870–1896
Dr. Thomas Blaney, C.I.E.	1887–1896
Mr. I. O'Callaghan	1894–1898
Sir Dinshaw Manockjee Petit, Bart.	1888–1898
Mr. P. C. H. Snow, I.C.S., C.I.E.	1895–1898
Mr. J. T. Hathornthwaite, M.A.	1896–1899
Mr. Jamsetjee N. Tata	1898–1900
Mr. Dossabhoy Framjee, C.S.I.	1888–1901
The Hon. Mr. Justice M. G. Ranade, M.A., LL.B., C.I.E.	1893–1901

Past Members of the Board—*contd.*

Sir George Cotton, Kt.	1888–1901
Lt.-Col. H. D. Oliver, R.E.	1898–1901
Mr. H. Wenden, C.E.	1900–1902
Mr. G. A. Barnett, C.I.E.	1889–1900
Mr. W. H. Sharp, M.A.	1901
Lt.-Col. C. B. Mayne, R.E.	1901–1902
Mr. M. Macmillan, B.A.	1902
Mr. H. V. R. Kemball, C.E.	1903
Dr. Cowasjee Hormusjee, G.G.M.C.	1896–1903
Mr. T. W. Cuffe	1902–1904
Mr. W. L. Harvey, I.C.S., C.I.E.	1898–1905
Mr. R. J. Kent, C.E.	1904–1905
Mr. S. M. Edwardes, C.I.E., I.C.S.	1907–1908
Mr. G. L. Burns	1903–1908
Mr. H. W. Traill	1907–1908
Mr. W. D. Sheppard, I.C.S.	1905–1910
Mr. A. K. Leslie	1908–1910
The Hon. Sir N. G. Chandavarkar, Kt., B.A., LL.B.	1901–1912
Mr. Bomanjee Dinshaw Petit	1895–1913
The Hon. Sir P. M. Mehta, K.C.I.E., M.A.	1887–1915
Mr. P. R. Cadell, I.C.S.	1908–1916
Mr. S. J. Sarjant, M.I.M.E.	1903–1919
Sir Bhalchandra Krishna, Kt., L.M.	1903–1919
Mr. P. W. Monie, I.C.S.	1916–1919
Mr. Bomanjee Dinshaw Petit	1895–1913
Mr. G. H. Thistleton Dyer, M.A.	1914–1920
Mr. J. Wallace, C.E.	1903–1921
Mr. G. Wittet, F.R.I.B.A.	1919–1922
Mr. J. J. C. Paterson	1923
Sir G. K. Parekh, Kt., B.A., LL.B.	1912–1925
Sir Fazulbhoy Currimbhoy, Kt. F.U.B.	
Mr. S. Woods Hill, A.R.I.B.A., F.U.B., J.P.	
Mr. J. M. D. Wrench	
Mr. C. N. Wadia, C.I.E., M.L.C.	
Mr. Leslie Flatt, B.Sc., M.I Mech. E., M.I.C.E.	

Passed Students of the Textile Department Employed in Bombay Mills.

NAMES.	MILLS.
Managers.	
Madan, R. R.	Jam.
Patil, D. G.	Elphinstone.
Madan, R. E.	China.
Master, R. J.	Manchester.
Superintendent.	
Rele, G. R.	Morarji Group.
Carding Masters.	
Joshi, B. E.	Spring.
Gadially, C. P.	Bomanji Petit.
Francis D' Souza (*a*)	Standard.
Golatkar, V. A.	Jacob Sassoon.
Mahtre, R. H. (*a*).	Jacob Sassoon.
Ramanna, V.	Jacob Sassoon.
Oliveira, J. (*a*).	Gold Mohur.
Spinning Masters.	
Mehta, B.	Spring.
Kanakaraju, K. (*a*).	Morarji.
Karandikar, V. G. (*a*).	Morarji.
Narayanachariar.	Ambernath.
Krishnan, K. N. (*a*).	Ambernath.
Wadia, J. M. (*a*).	Mahomedbhoy.
Desai, D. N (*a*).	Madhowji.
Borker, B. M.	Manchester.
Khatri, D. P. (*a*).	Hindustan.
Bhiwanker, L. R. (*a*).	Finlay.
Carding and Spinning Masters.	
Kolatkar, S. S.	Morarji Goculdas.
Manohar, V. R.	Alliance.

NAMES.	MILLS.
Weaving Masters.	
Bhandekar, A. S. (*a*)	Planet.
Engineer, H. N. (*a*).	Spring.
Sayhiar, P. B. (*a*).	Spring.
Sampat, D. P. (*a*)	Morarji.
Subbaraman, E. R. (*a*).	Morarji.
Patel, E. K. (*a*).	Simplex.
Tavaria, D. N. (*a*).	Kurla.
Gandhi, G. (*a*).	Tata.
Bhatena, S. M. (*a*).	Tata.
Gawan, R. R. (*a*).	Elphinstone.
Desai, B. B.	New Kaiser-i-Hind.
Lam, N. B. (*a*).	Maneckji Petit.
Motiwala, B. D.	Alliance.
Bardi, H. T. (*a*).	Crescent.
Kalapesi, D. M. (*a*).	Fazulbhoy.
Godbole, V. H.	Madhowji.
Wesmakar, N. G.	Hindustan.
Kulkarni, B. P. (*a*).	Ripon.
Pai, R. P.,	Mathuradas.
Katrak, F. R. (*a*).	Textile.
Fozdar, G. K. (*a*).	Hindustan.
Kalale, R. R. (*a*).	Finlay.
Rodriques, P. M. (*a*).	Jacob Sassoon.
Sukhadwalla, C. J. (*a*).	Indian Woollen.
Zaveri, R. J. (*a*).	Assur Verji.
Sion Moses.	Phœnix.
Mudabhatkal, S.	Planet.
Guard, L. N. (*a*).	Kastoorchand.
Tulpule, D. V. (*a*)	Kohinoor.
Sizing Masters.	
Changle, B. M.	Kastoorchand.
Sanjana, K.	Currimbhoy.
Sircari, M. S.	Alliance.

(*a*) Those marked (*a*) are Assistants.

Depression in the Textile Industry in 1925-26.

Enquiry by the Government of India.

THE Bombay Millowners' Association made an application to the Government of India, in June 1926, requesting that the Tariff Board, or some other committee similarly constituted and with similar powers, may be directed to enquire into the causes of the depression in the Bombay cotton textile industry and to suggest measures which might be taken to restore prosperity. The Government of India agreed that this enquiry should be made and considered that it should be held as soon as possible and appointed a special Tariff Board for the purpose of the enquiry with the following terms of reference:—

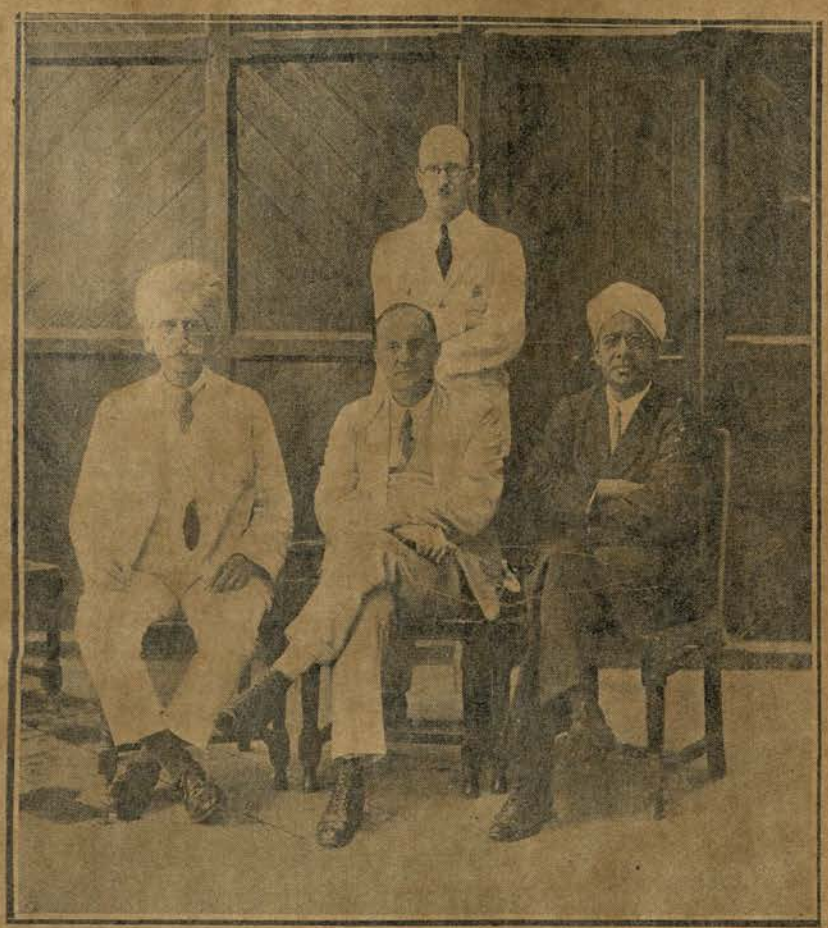
(1) To investigate the condition of the cotton textile industry in India with special reference to the industry in Bombay and Ahmedabad;
(2) to examine the causes of the depression in the industry and to report whether they are of a temporary or of a permanent character;
(3) in particular, to consider whether, and if so to what extent, the depression is due to the competition of other countries in home and export trade;
(4) to report whether, having regard to the fact that the industry has long been firmly established in India and to the interests of the consumer and to all other interests affected, the industry is in need of protection, and, if so, in what form and for what period protection should be given; and
(5) to make any other recommendations that are germane to the subject.

The following gentlemen were appointed on the Board:—President: Mr. F. Noyce, C.S.I., C.B.E., I.C.S. Members: Rai Bahadur Pandit Hari Kishan Kaul, C.S.I., C.I.E.; Mr. N. S. Subba Rao, M.A., Bar-at-Law; Secretary: Captain D. F. Keegan.

The Tariff Board commenced the enquiry in Bombay in July 1926 on receipt of a representation from the Bombay Millowners' Association reviewing the causes which had led to the depressed condition of the industry and putting forward the following proposals:—

(1) The abolition of the duties on machinery and mill stores.
(2) The abolition of company super-tax and the Bombay town duty of one rupee per bale.
(3) Reduction of railway freights from Bombay to the principal up-country markets.
(4) Negotiations with steamship companies for the reduction of shipping freights from Bombay to all export markets.
(5) The appointment of Trade Commissioners in various countries to assist India's export trade.
(6) The adoption of a scientific tariff which will protect goods manufactured in India from unfair competition from foreign countries.

The Bombay Millowners' Association considered that, in order to place the cotton textile industry in India on an equality with foreign countries in respect of costs of manufacture, additional protection to the extent of 13 per cent. was required in addition to further protection to enable the mills to make the necessary allowances for depreciation to plant and machinery.



[Photo by Fred Mitchell.

THE COTTON TEXTILE INDUSTRY TARIFF BOARD, 1926.

Raja Hari Kishan Kaul, C.S.I., C.I.E. | Mr. Frank Noyce, C.S.I., C.B.E., I.C.S. (President). | Mr. N. S. Subba Rao, M.A., Bar-at-Law.

Capt. D. F. Keegan, Imperial Customs Service (Secretary).

The Cotton Textile Industry Tariff Board commenced work in Bombay in July 1926 and also visited other industrial centres and factories including Madras, Calcutta, Cawnpore, Delhi, Ajmer and other places. The enquiry was completed about the end of November 1926, and the Report was submitted to the Government of India in January 1927.

Based on this statement, the Textile Tariff Board issued a Questionnaire in reply to which written statements were received from commercial bodies, the departments of Government and individuals connected with the textile and allied industries. The Bombay Millowners' Association submitted a lengthy statement in which they pointed out that the industry was handicapped to the extent of 8 per cent. on account of exchange and an additional 5 per cent. on account of double shift working made possible by the employment of female labour at night in the Japanese mills. The Indian industry thus required, in order to place it in an equal position with foreign countries in respect of the cost of manufacture, additional protection equivalent to 13 per cent. and further additional protection to enable the Bombay mills to make the necessary allowances for depreciation to plant and machinery. It was the considered opinion of the Association that if the sterling exchange were brought down to 1s. 4d. gold and if Japanese mills were made to work one shift not employing women and children at night, then the local industry could stand on its own legs and would not require protection. The Association stated most emphatically that the industry had been treated as a Cinderella. The slogan of the Government of India during the industry's seventy years existence had been "when in want of money tax the cotton industry." Acts and measures had been passed and changes in exchange policy had been made without the slightest reference or slenderest regard to their bearing on its well being till now the industry stood in danger of immediate collapse unless needful and speedy succour was rendered.

Enquiry by the Tariff Board.

The following witnesses submitted their written statements but were not examined orally by the Tariff Board :—

Bombay Witnesses.

Bombay Chamber of Commerce.
Mr. T. Tamagaki : Japan Cotton Spinners' Association.
Indian Central Cotton Committee.
Bombay Native Piecegoods Merchants' Association.
Marwari Chamber of Commerce.
Mechanical Engineers Association.
Mr. Y. S. Thakkar.
Mr. K. S. Deshpande.
Mr. Sri Ram Khushaldas of Messrs. Chotalal Chhaturbhuji.
Mr. K. D. Gordhan.
Mr. Ratilal T. Thakar of Messrs. Ratilal & Co.
Mr. J. H. Warden.
Director of Agriculture.

Abstracts from the Millowners' Statement and other statistics and figures regarding the Japanese mill industry are published on pages 428 to 440 and 590 to 596.

Up-country Witnesses.

Mr. S. R. Tikekar, Tikekarwadi.
Sholapur District Weavers' Central Co-operative Union, Sholapur.
Hosiery Manufacturers' Association, Calcutta.
Calcutta Liners' Conference.
Buyers and Shippers' Chamber, Karachi.
Karachi Chamber of Commerce.
Upper India Chamber of Commerce, Cawnpore.
Madras and Southern Mahratta Railway.
Mr. C. C. Dalal, Gujarat Hosiery Factory, Ahmedabad.
Mr. Ambalal Sarabhai, "
Mr. Jivanlal C. Shah, "
Mr. K. M. Mukerjee, Calcutta.
Mr. N. G. Runga, Nidubrolu, Guntur District.
Managers of the Mills in Sholapur Town.
Some Shareholders of the Textile Mill Co., Ahmedabad.
Mohini Mills, Ltd., Khushtia, Bengal.
The New Industries Ltd., Calcutta.
Government of Madras.
Mr. H. Mookerji, Appraiser, Custom House, Calcutta.
Director of Agriculture, Bengal.
Director of Agriculture, United Provinces.
Government of the Punjab.
Government of Assam.
Government of Burma.
Government of Central Provinces.
Government of Bihar and Orissa.
Chief Commissioner, Ajmere-Merwara.

The following witnesses were examined orally by the Tariff Board :—

Bombay Witnesses.

Bombay Millowners' Association.
Japan Cotton Spinners' Association, Osaka, Japan.
Bombay, Baroda and Central India Railway.
Great Indian Peninsula Railway.
Government of Bombay.
Mr. J. Addyman, Bombay Woollen Mfg. Co., Ltd.
Messrs. A. F. Ferguson & Co., Chartered Accountants.
Mr. G. N. K. Iyer, Victoria Mills.
Mr. A. H. Manek.
Mr. C. M. Gupta.
Mr. B. N. Karanjia.
Mr. J. A. Wadia.
Mr. Narandas Purshottam.
Mr. Chunilal B. Mehta.
Mr. P. A. Baptista.
Mr. A. B. Tata.
Mr. C. I. Parekh.
Sir Purshotamdas Thakurdas.
Mr. B. F. Madon, c/o Messrs. R. D. Tata & Co., Ltd.
Mr. W. W. Nind, Acting Collector of Customs.
Director of Industries, Bombay.

Mr. J. F. Gennings, Director of Information and Labour.
Mr. G. Findlay Shirras, Principal, Gujarat College, Ahmedabad.
Prof. M. J. Antia, Sydenham College of Commerce and Economics.
Mr. S. H. Jhabvala, Hon. Secretary, Central Labour Board.
Mr. D. M. Thackersey, President, Bombay Country Fancy Piece-goods Merchants' Association.
Messrs. Lalji Naranji and Walchand Hirachand, Representatives of the Indian Merchants' Chamber.
Mr. G. W. Burley, Principal, V. J. T. Institute.
Bombay Textile Labour Union.
Representatives of the Girni Kamgar Mahamandal.
The Indian Institute of Political and Social Service.
East India Cotton Association.

Up-Country Wtnesses.

Mr. M. H. Kantavala, Baroda Millowners' Association.
Ahmedabad Millowners' Association.
Messrs. Lalbhai Bogilal and Hiralal Keshavlal, Ahmedabad.
Mr. Jivanlal V. Desai, Bar-at-Law. ,,
Mr. G. I. Patel, B.A., M.L.C. ,,
Madras Textile Labour Union.
Southern India Chamber of Commerce (Mr. C. Gopala Menon, M.L.C., and Haridoss Visonji, Manager of the Madras W. S. & W. Mills, Ltd.).
Piecegoods Merchants' Association, Madras.
Bengal Chamber of Commerce, Calcutta.
Marwari Chamber of Commerce, Calcutta.
Indian Chamber of Commerce, Calcutta.
President, Punjab Chamber of Commerce, Delhi.
Piecegoods Association, Amritsar.
Mr. H. B. Shivdasani, M.A., M.L.C., Ahmedabad.
Mr. Ramanlal G. Shah, Ahmedabad.
Mr. C. B. Mehta, Representative of Kasturbhai Lalbhai, Ahmedabad.
Rai Bahadur Badridas Goenka, Calcutta.
Collector of Customs, Madras.
Textile Expert, Madras Government.
Collector of Customs, Calcutta.
Director of Industries, Bengal.
Director of Industries, Cawnpore.
Industrial Surveyor, Delhi.
Dr. R. C. Rawlley, Director of Industries, Punjab.
Messrs. N. Sirur & Co., Agents, Mysore Spinning and Manufacturing Co., Ltd., Bombay.
Mr. B. C. Sutaria, Agent, Batavia Sea & Fire Insurance Co., Ltd., Ahmedabad.
Mr. G. I. Patel : Ahmedabad Fine Mills, Ltd., Shri Ramakrishna Mills Co., Ltd., Shri Vivekanand Mills Co., Ltd., Hirabai Manufacturing Co., Ltd., Shri Weaving and Manufacturing Co., Ltd., Raipur Mills Co., Ltd., and Ahmedabad Jupiter Spinning, Weaving and Manufacturing Co., Ltd.
Mr. Baldevdas V. Parikh, Ahmedabad Fine Knitting Co., Ltd.
Mr. Ramnath Goenka, Dubash, The Bombay Co., Ltd., Madras.
Messrs. G. W. Chambers and J. A. Hargreaves, Binny & Co., Ltd., Madras.
Mr. Sitaram Khemka : Birla Cotton Mills, Delhi.
Delhi Cotton and General Mills Co., Ltd.

Japanese Competition : Some Facts and Figures.

The Yarn Trade.

WITH a total spindleage of less than five million, Japan produces over two million bales of yarn per annum, whereas India with 8¼ million spindles only produces 1¼ million bales of yarn.

With only just over 60,000 looms, Japan produces well over 1,000 million yards of piece-goods per annum ; India with two and a half times as many looms, only produces 1,700 million yards of cloth per annum.

The effect of this on the cost of production of Japanese piece-goods and yarn will be apparent.

Japan, owing to her larger production of yarn and piece-goods for export, has a much better balanced trade than India.

The cotton consumed by 5 million spindles in Japan is considerably greater than the cotton consumed by 8¼ million spindles in India.

Taking a five-year average, it will be seen that while Japan has almost maintained her yarn export trade with China, India has almost entirely lost hers.

Trade in Piece-goods.

In piece-goods the position is much more unfavourable to India, the value of India's piece-goods export trade to China being only about one-tenth of what it was. Japan's trade has increased forty or fifty fold.

What strikes one most in considering the growth of Japanese competition is the amazing rapidity with which her imports into this country have gone up. It may be broadly stated that in 1914-15, the total imports of Japanese yarn into India were less than a million pounds while in 1924-25, *i.e.*, about ten years later, the quantity imported was more than 32 times the figure of 1914-15. Again, in piece-goods, the quantity imported in 1914-15 was about 16 million yards and in 1925-26 it had risen to nearly 220 million yards.

The underquoted figures of imports of Japanese piece-goods into India during the last five years show how rapidly these imports are increasing :—

Year.	Quantity in yards. (000's omitted.)	Value in Rs. (000's omitted.)
1921-22	90,275	36,702
1922-23	107,778	42,490
1923-24	121,902	45,945
1924-25	155,302	57,463
1925-26	216,829	68,814

It is forgotten that not only is Japan dealingsevere blowsto Indian manufacturers in Indian markets, but she is making rapid inroads in the export markets. In the words of the Administration Report of the Bombay Presidency for 1923-24 :—

> "Since 1917, China has been practically a closed market for Indian piece-goods owing mainly to the expansion of the indigenous textile industry and to the rigour of Japanese competition."

India has practically lost her export trade in yarn, and since this yarn has necessarily to be utilized in manufacturing cloth, it is of the utmost importance to develop the export trade, but here again, Japan, with the unfair advantages she is enjoying over India, is proving a very formidable rival, for not only has she ousted India from the Chinese market, but is rapidly capturing her foreign markets, *e.g.*, Egypt, East Africa, etc.

One of the most characteristic features of Japanese competition is that the Japanese select particular descriptions of goods which are manufactured in India. This serves to lower prices of those particular descriptions and this reacts on prices all round. The most striking instance of this is afforded by the manner in which the Japanese have attacked the trade in sheetings, T-cloth and domestics. The imports of this description of goods ten years ago was only about 6 per cent. of the total quantity placed on the Indian market, while at present the imports in this description are very nearly the same as the quantities manufactured by Indian mills. In this

description of goods Japanese imports show a very marked increase. In 1915-16 while they were about 1¼ millions of yards, they were 52 million in 1918-19 and have stayed at a comparatively high figure ever since. Thus :

Imports from Japan of Plain Grey Sheetings in millions of yards.

1918-19	52	1922-23	41
1919-20	16	1923-24	54
1920-21	41	1924-25	34
1921-22	35		

Another important convention adopted at Washington prohibited the employment of women and children at night and it is well known that this convention has not yet been observed by Japan. It is by working twenty to twenty-two hours a day in double shifts and by employing women and children at night that the Japanese are able to turn out goods much in excess of their home requirements and at a cost which is necessarily less than the cost of manufacturing similar goods in countries which work one shift and do not employ women and children at night. This surplus production Japan is able to export to India and India's foreign markets at prices at which Indian mills cannot afford to manufacture.

Loss of the China Trade in Yarn.

Until the year 1893 the yarn trade with China was undoubtedly the bulwark of the prosperity of Bombay's cotton mill industry. Owing to the large market for yarn in China, the spinning side of the Bombay mill industry developed out of all proportion to the weaving side of the industry. Some progress had been made in the weaving section, but to all intents and purposes the piece-goods trade was confined to the Indian market.

In 1893 the Indian mints were closed to the free coinage of silver as a preliminary to the linking of the rupee to gold in 1898 in the interests of the development of trade with gold-using countries. The effect upon the yarn trade with China, which still retained a silver currency, was immediate and disastrous, and though for some years the average bulk of the yarn exports to China did not diminish, sales had to be made at sacrifice prices.

There has been a decrease in the annual production of yarn. Whereas in 1907-08 72 per cent. of the production of Bombay mills was marketed in the form of yarn, in 1924-25 only 38 per cent. was put on the market in the form of yarn.

The total export trade in yarn in 1924-25 was only about one-sixth of what it was in 1907-08.

The increase in the number of looms and the consequent increase in the production of cloth in Bombay City and Island has not been sufficient to compensate for the loss of the China trade in yarn.

Effect of Government's Currency Policy.

The closing of the mints in 1893 and the linking of the rupee to gold drove the first nail into the coffin of the China trade in yarn.

The increase in the cost of production due to the increase in wages given on account of the rise in the cost of living brought about by the war, in spite of the high and unnatural 2s. ratio, has added considerably to the burden on the industry.

The fixation of the value of the rupee at 1*s.* 6*d.* gold instead of 1*s.* 4*d.* gold would give competing countries a considerable advantage as compared with 1914 in competition with India in the home and foreign markets, owing to the fact that it would mean a permanent increase of 12½ per cent. in many items of the cost of production reckoned in terms of international value, and this increment combined with the increases in cost of production owing to the great rise in wages compared with pre-war years, would militate against the successful future development of the industry in India and would probably prevent any further progress in foreign markets.

A very great impetus has been given to Japanese competitors through the normal parity of Rs. 153 per 100 yen having been reduced by the recent increase in the gold value of the rupee to 134.

In 1921 and 1922 Japanese competition had not assumed its present formidable aspect.

From February 1924 until February 1925 the factor of a gradually depreciating Japanese exchange coupled with the appreciation of the rupee exchange began to act in favour of the Japanese and enabled them to compete successfully against Bombay mills in the Indian market.

During the whole of 1924 the Japanese were greatly assisted in their competition with Indian mills by the low value of the yen and its constant depreciation, and that from the middle of 1924 they were able to undersell Indian mills owing to the low value of the yen apart from the added gain from the gradual depreciation of the yen.

During 1925 and 1926 the Japanese have not had the benefit of a falling exchange, but the general level of value of the yen has been low enough in itself to enable Japanese mills to undersell Bombay mills by a very considerable margin.

Cotton Mills in Japan.

Name of Mills.	No. of Mills.	Business Address.	Spindles.	Looms.
Aichi Orimono ..	2	Chikusa-cho, Nagoya.	47,190	1,070
Asahi Boshoku ..	1	3-Chome, Honcho, Tokyo.	29,060	500
Ashikaga ..	1	Yoshi-cho, Nihonbashi-ku, Tokyo.	30,000	300
Dainippon ..	23	3-Chome, Bingo machi, Osaka.	672,880	7,800
Fuji Gas ..	7	Oshima-cho, Minami, Katsushika, Tokyo.	388,580	2,850
Fukushima ..	8	2-Chome, Tamaye-cho, Osaka.	189,140	1,050
Fukuyama ..	2	Matsuhama-cho, Fukuyama, Bingo.	3,700	....
Handa Menko ..	1	2-Chome, Hondendori, Osaka.	13,390	....
Hattori Shoten ..	4	1-Chome, Miya-cho, Nagoya.	44,890	2,260
Hidaka Boshoku	1	Gobo-cho, Hidaka-gun, Wakayama-ken.	10,350	....
Hinode Boshoku	3	Gobo-cho, Wakayama-ken.	62,290	....
Hokusen Bosekisho	2	Ostsu-cho, Senboku-gun, Osaka-fu.	11,510	300
Ichikawa Bosekisho	1	Ichikawa, Daimon-cho, Yamanashi-ken.	2,720	....
Izumi Boseki ..	1	Haruki, Sennan-gun, Osaka-fu.	47,010	610
Izumi Orimono ..	4	Kamori, Sennan-gun, Osaka-fu.	13,020	1,350
Izumo Seishoku ..	2	5-Chome, Bakuro-Machi, Osaka.	34,900	60
Kaizuka Boshoku	7	Kaizuka-cho, Sennan-gun, Osaka-fu.	10,410	1,550
Kanazawa ..	1	Omameda-Shin Machi, Kanazawa.	50,860	....
Kanegafuchi ..	27	Higashi-Shirike, Kobe.	520,670	4,050
Kashiwara Boshoku	1	Kashiwara-cho, Minamikawachi Osaka-fu.	11,780	620
Kikui Boshoku ..	1	Yoneno-cho, Nagoya.	38,630	590
Kishi Wada ..	7	Kishi Wada, Osaka-fu.	159,240	650
Kiyo Shokufu ..	2	Okamachi-mura, Kaiso-gun, Wakayama-ken.	38,460	480
Kondo Bosekisho	1	Yobitsumi-cho, Nagoya.	42,920	1,040
Kurashiki ..	12	Kurashiki-cho, Okayama-ken.	232,880	950
Kyodo	1	Biwaji Machi, Achi-ken.	23,200	....
Marusan Hiuchi Bosekisho.	1	Mishima-cho, Wma-gun, Ehime-ken.	11,480	....
Matsuda Menpu	1	Motomachi Bugyo-cho, Wakayama.	9,190	500
Meiji ..	3	Tobata-cho, Fukuoka-ken.	33,630	340
Mosurin Boshoku	1	Nakatsu-cho, Nishinari, Osaka.	29,920	....
Nagasaki Boshoku	2	Saiwai-cho, Nagasaki.	93,900	....
Nagoya ..	2	Hachino-cho, Nagoya.	80,200	....

(From list published by Messrs. Cursetjee Bomanjee & Co.)

Cotton Mills in Japan—(*Contd.*)

Name of Mills.	No. of Mills.	Business Address.	Spindles.	Looms.
Naigai Boseki ..	2	Eiraku-cho, Kojimachi-ku, Tokyo.	16,050	60
Naigai Wata Kaisha	2	Dojima-Kitamachi, Osaka.	31,300	800
Naniwa Boshoku	3	Hamadera-cho, Osaka-fu.	32,410	1,400
Nisshin ..	6	Kameido-cho, Tokyo-fu.	246,430	1,410
Omi Hanpu ..	6	Hachiman-cho, Shiga-ken.	53,170	1,050
Osaka ..	1	Shindachi-mura, Sennan-gun, Osaka-fu.	20,370	40
Osaka Godo ..	12	Dojima-Hamadori, Osaka.	305,520	2,700
Osaka Meriyasu ..	2	Kozu-cho, Mitsuya, Osaka-fu.	38,400	310
Osaka Orimono ..	1	Shichido, Sakai, Osaka-fu.	40,340	970
Owada Boshoku	2	Chibune-cho, Owada, Osaka.	20,910	740
Ozu Burin Kigyo	1	Utsubo, Minami-dori, Osaka.	20,500	....
Saga ..	1	Kamino-cho, Saga, Saga-ken.	32,250	410
Sagami ..	2	Sakai-cho, Nihonbashi-ku, Tokyo.	48,930	....
San-in Boshoku ..	1	Kurayoshi-cho, Tottori-ken.	13,600	....
Sano ..	1	Sano-cho, Sennan-gun, Osaka-fu.	9,840	....
Sanko ..	1	Minami-Maki-cho, Kyobashi, Tokyo.	20,610	....
Senshu Orimono	3	Kishiwada, Osaka-fu.	21,180	1,440
Takio ..	2	3-Chome, Hancho, Tokyo.	10,100	....
Tamaki Menpu ..	4	Utsumi-cho, Kaiso-gun, Wakayama-ken.	9,970	310
Teikoku Yoriito Orimono	1	Kami-Nagoya-cho, Nagoya.	8,100	200
Tenma Boshoku	1	5-Chome, Tenmabashi-suji, Osaka.	16,030	760
Tenma Orimono	2	5-Chome, Kitahama, Osaka.	64,640	1,140
Terada Boseki Kosho	1	Asago-mura, Sennan-gun, Osaka-fu.	10,600	....
Tokyo Mosurin ..	1	2-Chome, Kakigara-cho, Tokyo.	79,110	1,240
Toyama ..	1	2-Chome, Azuchi-machi, Osaka.	33,000	160
Toyo Mosurin ..	3	1-Chome, Yuraku-cho, Tokyo.	65,420	1,810
Toyo ..	29	Dojima-Hamadori, Osaka.	632,660	13,140
Toyoda Boshoku	1	Sakan-cho, Nishi-ku, Nagoya.	34,680	930
Tsuji ..	3	Mibu, Hanai-cho, Kyoto.	38,400	330
Ube Boshoku ..	1	Uno-cho, Yamaguchi-ken.	10,530	300
Utsumi Boshoku	2	Utsumi-cho, Kaiso-gun, Wakayama-ken.	26,920	590
Wakayama Boshoku	8	Denbobashi, Minamino-cho, Wakayama.	95,630	1,360
Wakayama Senko	1	Ishibashi-cho, Wakayama.	2,020	210
Yamamoto Bosekisho	1	Itachi-bori, Minami-dori, Osaka.	3,880	....
Yamazumi Bosekisho	1	c/o Amemiya, Shoten, Tobabori, Uramachi, Osaka.	5,190	....
Yoshimi Boshoku	2	Yoshimi, Sennan-gun, Osaka-fu.	30,560	980

The Working of the Japanese Cotton Mills.

It should be noted that in April, 1925, the Hon'ble Sir Charles Innes had a conference with the Committee of the Bombay Millowners' Association and subsequently Sir Charles prepared a statement summarising the discussion that had taken place and embodying his own views. On the subject of the advantages enjoyed by Japan, he stated:—

> "I was prepared to admit that the Japanese millowner had an advantage in that he worked double shifts. Our information went to show that in Japanese spinning mills the proportion of women to men was as 3 to 1 and that on an average 26 days per month and 19 hours per day were worked. There were two shifts. The result was that in 1923, the output per spindle was more than 200 lbs. of yarn. In India in 1924-25, the output per spindle was 87 lbs. of yarn. Thus, the Japanese clearly got the advantage of large-scale production. Similarly, certain facts had come to our knowledge about the weaving mills. The ratio of women to men was 5 to 1. Particulars of 19 big mills showed that they worked 26 days per month and an average of 14 hours per day. The output of cloth per loom was 19,000 yards in a year. In India it was 13,000 yards."

It is true that the Hon'ble Sir Charles Innes was not prepared to admit that Japanese competition was the sole factor contributing to the depression of the mill industry but the above-quoted extract at least goes to show that the Japanese enjoy undisputed advantages in their competition with the mill industry of India.

Silver Prices and Rate of Exchange on Hongkong.

For purposes of comparison, the following figures are appended showing the Rates of Exchange on Hongkong and the Prices of Silver ruling at the end of March in each of the following years:

	Price of Silver. Per 100 Tolas.		Exchange on Hongkong.		Price of Silver. Per 100 Tolas.		Exchange on Hongkong.
	Rs.	a.	Rs.		Rs.	a.	Rs.
1894 ..	84	11-7/22	175-1/22	1910 ..	68	10-7/22	130-13/24
1895 ..	91	12	188-11/26	1911 ..	70	13-8/23	134½
1896 ..	92	9-11/12	186-6/13	1912 ..	78	9-7/23	143-21/26
1897 ..	83	9⅛	163-89/100	1913 ..	75	8	143¾
1898 ..	71	3	141¼	1914 ..	77	11/16	142¾
1899 ..	73	15-15/23	149-3/23	1915 ..	70	⅜	134
1900 ..	73	3¾	147	1916 ..	82	12	148
1901 ..	75	4-9/32	151-17/50	1917 ..	87	15	175¼
1902 ..	67	1-3/7	138-8/23	1918 ..	103	6	218
1903 ..	60	4⅞	119½	1919 ..	116	0	215
1904 ..	70	10-6/23	137-8/11	1920 ..	111	0	226
1905 ..	72	1	139-11/26	1921 ..	88	4	188
1906 ..	79	10⅜	155-11/36	1922 ..	90	12	187
1907 ..	83	14-7/11	162-1/16	1923 ..	83	1	179
1908 ..	70	1-2/23	142-19/30	1924 ..	81	14	171
1909 ..	62	8¼	131-2/13	1925 ..	72	3	153½

Fluctuations in Exchange Rates: 1919 to 1925.

Average Exchange Rates, Banks Selling Telegraphic Transfers, from April 1919 to October 1925.

1919.

Month.	Average Exchange.	Month.	Average Exchange.
April	1s. 5 31/32d.	August	1s. 8 31/32d.
May	1s. 6 31/32d.	September	1s. 11 19/64d.
June	1s. 7 31/32d.	October	2s. 1/32d.
July	1s. 7 31/32d.	November	2s. 1¼d.
		December	2s. 3 5/8d.

1920.

January	2s. 4½d.	July	1s. 10 1/16d.
February	2s. 8¾d.	August	1s. 10 7/16d.
March	2s. 5 3/16d.	September	1s. 10 1/8d.
April	2s. 4d.	October	1s. 7 7/8d.
May	2s. 2 15/16d.	November	1s. 7 5/16d.
June	1s. 11¼d.	December	1s. 5 9/16d.

1921.

January	1s. 5 5/16d.	July	1s. 3¼d.
February	1s. 3 29/32d.	August	1s. 4 3/16d.
March	1s. 3 5/16d.	September	1s. 5 47/64d.
April	1s. 3 5/8d.	October	1s. 4 51/64d.
May	1s. 3 5/16d.	November	1s. 4 1/8d.
June	1s. 3 27/64d.	December	1s. 4 1/62d.

1922.

January	1s. 3 53/64d.	July	1s. 3 21/32d.
February	1s. 3 29/64d.	August	1s. 3 37/64d.
March	1s. 3 9/32d.	September	1s. 3 9/16d.
April	1s. 3 5/32d.	October	1s. 3 5/8d.
May	1s. 3 35/64d.	November	1s. 3 13/16d.
June	1s. 3 35/64d.	December	1s. 3 63/64d.

1923.

January	1s. 4 37/64d.	July	1s. 4 5/64d.
February	1s. 4 7/32d.	August	1s. 3 63/64d.
March	1s. 4 7/64d.	September	1s. 4 1/8d.
April	1s. 4 1/8d.	October	1s. 4 31/64d.
May	1s. 4 3/32d.	November	1s. 4 59/64d.
June	1s. 4 3/32d.	December	1s. 5 5/64d.

1924.

January	1s. 5 7/64d.	July	1s. 5 7/32d.
February	1s. 4 53/64d.	August	1s. 5¼d.
March	1s. 4 11/16d.	September	1s. 5 31/64d.
April	1s. 4 51/64d.	October	1s. 6d.
May	1s. 4 51/64d.	November	1s. 5 27/32d.
June	1s. 4 59/64d.	December	1s. 6 3/64d.

1925.

January	1s. 5 31/32d.	June	1s. 6d.
February	1s. 5 31/32d.	July	1s. 6 5/64d.
March	1s. 5 29/32d.	August	1s. 6 3/32d.
April	1s. 5 27/32d.	September	1s. 6 9/64d.
May	1s. 5 15/16d.	October	1s. 6 5/32d.

Statement of Profits made by Japanese Mills.

(In thousands of Yen).

		Paid-up Capital.	Profit.	Percentage of Profit.	Reserve.	Dividend.	Percentage of Dividend.	Carry forward.
Dai-Nippon	1st half, 1924 ..	52,000	7,160	27.5	1,000	5,183	20	6,709
	2nd ,, 1924 ..	52,000	8,550	32.9	1,000	5,200	20	8,189
	1st ,, 1925 ..	52,000	8,534	32.8	1,000	5,200	20	9,215
Fugi Gas	1st half, 1924 ..	27,950	2,873	20.5	200	1,677	12	1,425
	2nd ,, 1924 ..	33,656	3,677	21.9	300	1,907	12	1,761
	1st ,, 1925 ..	33,992	3,891	22.9	311	2,040	12	1,980
Toyo	1st half, 1924 ..	31,850	5,297	33.3	1,000	3,981	25	5,302
	2nd ,, 1924 ..	31,850	6,800	42.7	1,000	3,921	25	5,452
	1st ,, 1925 ..	31,840	7,622	47.9	1,000	3,981	25	5,878
Kanegafuchi	1st half, 1924 ..	28,596	6,864	66.9	500	4,906	48	10,666
	2nd ,, 1924 ..	28,596	9,066	63.4	500	5,433	38	11,489
	1st ,, 1925 ..	28,596	5,020	63.1	500	5,433	38	11,786
Godo	1st half, 1924 ..	14,063	2,204	31.3	500	1,406	20	5,063
	2nd ,, 1924 ..	14,063	2,539	36.1	500	1,406	20	5,159
	1st ,, 1925 ..	14,063	2,671	38.0	500	1,406	20	5,277
Kurashiki	1st half, 1924 ..	12,322	1,410	26.4	100	1,067	20	1,282
	2nd ,, 1924 ..	12,350	1,600	25.9	100	1,235	20	1,301
	1st ,, 1925 ..	12,350	1,631	26.4	100	1,235	20	1,348
Nishin	1st half, 1924 ..	10,857	1,186	24.6	100	770	16	167
	2nd ,, 1924 ..	12,149	1,630	26.8	100	966	16	282
	1st ,, 1925 ..	16,125	1,987	24.6	100	1,122	16	398
Nikka	1st half, 1924 ..	8,800	440	12.0	40	365	10	321
	2nd ,, 1924 ..	8,800	528	12.0	40	440	10	240
	1st ,, 1925 ..	8,800	551	12.1	40	440	10	261
Fukushima	1st half, 1924 ..	5,600	1,300	46.4	100	896	32	3,529
	2nd ,, 1924 ..	5,600	1,459	52.1	100	896	32	3,584
	1st ,, 1925 ..	5,600	1,600	57.1	100	896	32	3,675
Hinode	1st half, 1924 ..	5,250	350	13.5	25	315	12	559
	2nd ,, 1924 ..	5,250	355	13.5	20	315	12	561
	1st ,, 1925 ..	5,250	471	17.6	30	315	12	576
Idzumi	1st half, 1924 ..	3,750	286	15.2	50	325	12	505
	2nd ,, 1924 ..	3,750	422	22.5	50	325	12	553
	1st ,, 1925 ..	4,500	408	18.1	50	247	12	614

Profit includes depreciation of fixed Capital.

NOTE.—The reserves in the above table are the actual reserves inclusive of reserves for the first half-year terms and carry-forwards also those carried forward to the present term, so that they are different from the figures as they stood at the end of the first half-year period.

NOTE.—The above figures relate to 11 Japanese Mill Companies representing in all 4,074,249 spindles and 41,812 looms and as the total number of spindles and looms in Japan is about 5,110,000 and 64,000, respectively, the profits given represent 79¾ of the total spindles and 65 per cent. of the total looms.

Japanese Cotton Mill Enterprise in Bombay.

WHILE the Tariff Board was collecting statements and evidence in regard to Japanese competition with the textile industry in India, Reuter cabled a Press message from London on October 9th, 1926, to the effect that a Japanese syndicate had purchased a group of cotton mills in Bombay belonging to a well-known firm of mill Agents. This announcement appeared soon after the news of the purchase of the Diamond Mills in Bombay by a local firm of Japanese merchants. Reuter's information was not, however, confirmed and the suggestion was treated by Bombay millowners as a feeler, because it was doubtful that Japanese financiers would venture to invest a large capital outlay and take the chance of managing cotton mills in Bombay under the very trying and difficult conditions with which they might not be able to cope.

However, the purchase of the Diamond Mills for the first time included the name of a Japanese syndicate in the list of millowners in the Town and Island of Bombay. This syndicate has, among its members, Mr. Anandiram Podar, cotton broker to Messrs. Toyo Menka Kaisha, Ltd., and the mill has been named the Toyo Podar Cotton Mills, Ltd., with Mr. T. Saskura, the manager of Messrs. Toyo Menka Kaisha, Ltd., as the managing director. Mr. K. Fujimari will act as the general manager while Mr. Sadachi, an expert in mill management, will be the technical adviser. It was stated that the machinery in certain departments would be replaced and that the mill would be thoroughly renovated. The price of the purchase was said to be Rs. 14,80,000 which is even less than the value of the buildings alone, which was shown at Rs. 17,68,000 in the 1924 balance-sheet.

The Diamond Mill now contains about 35,000 spindles and 760 looms and was known as the Hope Mill in 1892. It was converted into the Prospect Mill in 1913 and into the Diamond Mill in 1919. Its profit for 1922 was Rs. 9 lakhs while in 1924 it showed a loss of Rs. 1¼ lakhs.

The Diamond Mill bargain was all in favour of the Japanese buyers and did not by any means indicate a cheerful outlook for local millowners and investors who have given their best for the advancement and prosperity of this industry. In 1920-21 cotton mills in Bombay changed hands at fabulous prices while in 1924-25 more than half a dozen have had to be hawked about at the price of the land or building as in the case of the Diamond Mills. This clearly indicates the depressed state of the mill industry in Bombay.

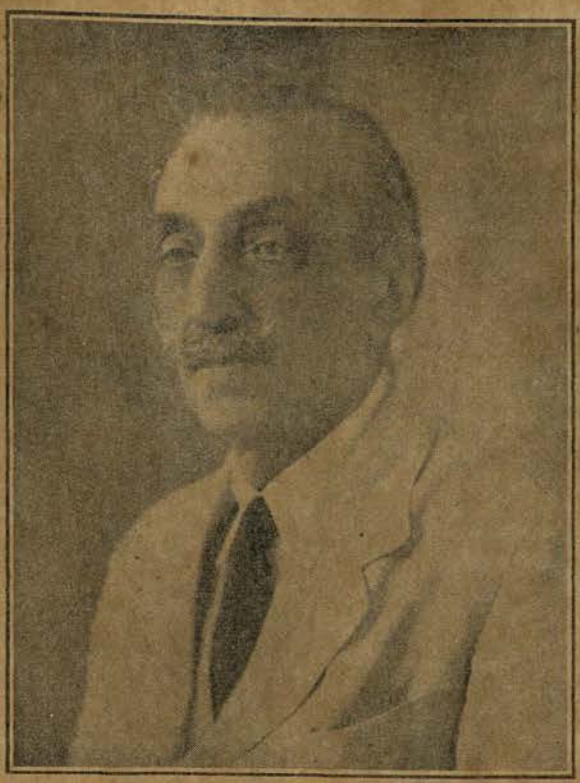
The management of Bombay cotton mills with British capital and under the direct supervision of directors and managers from Lancashire had been tried in former years in the case of several mills but without success. The Toyo Podar Mill is therefore a new departure in the management of cotton mills in India, and it has to be seen whether Japanese capitalists will prefer in the near future to compete with India in yarn and cloth manufactured in their own country or as next-door neighbours to the Indian spinners.

It will be the first time in the existence of the textile industry in India that a cotton mill will be owned by Japanese merchants and worked under Japanese technical advisers and managers, and local millowners will naturally await with great interest the publication of the first balance-sheet and profit and loss account of the Toyo Podar Mill in Bombay.

Indian Cotton for Japanese Mills.

The Japanese competition with theBombay mills originated with the import of small quantities of Indian cotton about the year 1888 for the spinning industry in Japan. Previous to this the textile industry of Japan was in a very backward condition and had to depend upon China for its supply of the raw material. However, after the introduction of Indian cotton the mill industry made rapid strides in Japan while her industrial progress generally showed a marked advance, especially after the Sino-Japanese war in 1895. Japan then began to compete with India in the Chinese market in yarn and cloth manufactured from Indian cotton. Thus from a small beginning with the import of raw material from Bombay, Japan is now competing with Indian mills not only in her own country but in China and other markets including the Indian market itself. It will therefore be instructive to recall the circumstances under which Japan imported and used her first supply of Indian cotton for manufacturing purposes.

According to the *Indian Textile Journal* Mr. R. D. Tata, was largely interested in Bombay's cotton and yarn trade with China and Japan and was in fact the pioneer in introducing Indian cotton among the Japanese mills. A small deputation of Japanese merchants connected with the cotton industry of their country, came out to India in 1889 to investigate the possibilities of using Indian cotton for Japanese mills. They had brought introductions to Messrs. Tata Sons of Bombay from their Hongkong branches and Mr. R. D. Tata not only gave them the necessary information but undertook to ship the first lot of some 32 bales of cotton to Japan. A year later (1890) Mr. Tata happened to go to Japan himself and there found to his surprise that the 32 bales sent by him were still lying unused as the Japanese did not know how to open out and work the hard-pressed cotton, they being familiar till then only with half-pressed or unpressed Chinese cotton. The Japanese were not aware of the cotton opening machines and Mr. Tata advised them to introduce the necessary machinery required for hard-pressed cotton bales. It was from this small beginning of 32 bales in 1890 that Mr. R. D. Tata developed and established the present export of Indian cotton to Japan on an extensive scale and which at the present day is approximately 16 lakhs bales. Thus in a short space of 35 years the whole outlook has changed; Japan not only takes away Indian cotton but spins and weaves it and sells the cloth back in India at a cheaper rate than what the Indian mills can do. This gives us an idea of Japan's progress in 35 years and Bombay's development and progress in 70 years since 1855.



The Late Mr. R. D. TATA.

Bombay lost one of its ablest and most enterprising citizens by the death of MR. R. D. TATA, in August, 1926. His activities extended not only to the important industrial and trade centres of India but also to those of China and Japan. As a matter of fact Mr. R. D. Tata was the pioneer in introducing Indian cotton among the Japanese mills as stated on page 598. During his many visits to Japan, Mr. Tata had made personal friends with the leading men of business and for his services in the development of the Indo-Japanese trade relations the Emperor of Japan was pleased to confer on him recently the high distinction of the Third Order of the Rising Sun, a title somewhat similar to the K.C.I.E., or C.I.E., in India. Quiet and unassuming in his ways Mr. R. D. Tata rendered invaluable services to his country, and while his name will remain closely associated with the rise and progress of the House of Tata, it will always be remembered worthily by the commercial and industrial communities of India and Japan.

The Pioneer Japanese Trading House in Bombay.

THE prospects of a flourishing trade in Indian cotton induced the Japanese firms to open out agencies in Bombay, and Messrs. Mitsui Bussan Kaisha, Ltd., were the first and largest purchasers of the raw material. It was about the year 1893 when the Agent of Messrs. Mitsui came out to India and commenced the buying and shipping of cotton through Messrs. Lyon & Co. of Bombay under the supervision and advice of Mr. N. S. Glazebrook, the head of the firm. In view however of the rapid development of the mill industry in Japan and the growing demand for Indian cotton, Messrs. Mitsui separated from Messrs. Lyon & Co., and started their own independent firm in Bombay in 1895-96 under their first Manager, Mr. T. J. Majima, and commenced the shipment of cotton, theirs being the first Japanese firm in the country.

This was during the period when the shipments of Indian cotton to the Japanese ports amounted to 16 per cent. of the whole trade or larger than the shipments to any other country except Germany. During the first year of their independent establishment Messrs. Mitsui shipped nearly 70,000 bales of cotton to Japan, and the business of the firm since then has grown considerably.

Messrs. Mitsui Bussan Kaisha, Ltd., have thus taken the lead as the early pioneers of the export of Indian cotton to Japan and the Far East, and it should be noted that they have done this in the midst of various difficulties and at considerable sacrifice of time and capital. Their cotton, cotton piecegoods and cotton yarn department was subsequently transferred to Messrs. Toyo Menka Kaisha, Ltd., who have since the year 1922 opened the Jinja Agency in Uganda in East Africa, to deal direct with African cotton and importing yarn and piecegoods. The amount of transactions made by the Company is quite a considerable one, their export of Indian cotton in 1925-26 being over 550,000 bales or one-third of the total exports to China and Japan. It is also instructive to note that of the total number of exports of 35 lakhs of bales of Indian cotton, as many as 15 lakhs go to Japan while 10 lakhs are used by the Bombay mills, 5 lakhs are shipped to China and 6 lakhs to Europe and the U. S. A.

As Messrs. Mitsui were the first in the field to establish a Japanese firm in India they have been the first to acquire a cotton mill in this country, as described on page 597 in reference to the purchase of the Diamond Mill in Bombay and its conversion into the Toyo Podar Cotton Mills, Ltd.

The desire of Japanese firms to run cotton mills in India would seem to date back to the early years of the war when the large profits made by the local mills served as an irresistible inducement for investment in India. However, for some reason or other, the proposals did not fructify then, and the subsequent depression in the Indian industry and the earthquake in Japan led to a temporary postponement of the idea. Japanese firms, however, now seem to feel that the worst is over, even with the Indian mills, and they are inclined to predict a bright future for the textile industry. They have, therefore, evidently taken advantage of the present low prices and have acquired a small mill as an experimental measure, especially in view of the favourable geographical position of India for the export trade and the large home demand. They, however, take it as a venture, and it is to be seen with what success they can manage the Toyo Podar Mill.

MR. K. TSUKADA, the First Manager, Toyo Menka Kaisha, Ld., Bombay.

THE TOYO PODAR COTTON MILLS, BOMBAY.

Left to Right—Standing :—Mr. M. Sadachi, Superintending Engineer ; Mr. H. Shingu, Auditor ; Mr. Ramniranjan Anandilal ; Mr. Y. Sano, Director ; Mr. K. Fujimori, General Manager.

Sitting :—Mr. T. Sasakura, Managing Director ; Mr. T. Yenjoji, Consulting Engineer ; Mr. Anandilal Podar, Director.

Messrs. Mitsui Bussan Kaisha, Ltd.—*contd.*

While Messrs. Mitsui have taken a leading position among the Japanese merchant houses in India, in Japan itself the name of Mitsui signifies one of the oldest and richest of family corporations commanding the highest respect and esteem during an existence of 300 years. For it should be noted that for centuries the Mitsui business has been conducted as a purely private concern consisting of eleven families belonging to the same house, at the head of which now presides Baron Hachiroeman Mitsui. The members of the families formed themselves into a private firm under the title of Mitsui & Company which now holds almost the whole of the capital in the following concerns:—

Mitsui Bussan Kaisha, Ltd.	Capital. Yen	100,000,000
Toyo Menka Kaisha, Ltd.	,, ,,	25,000,000
Mitsui Bank, Ltd.	,, ,,	100,000,000
Mitsui Mining Co., Ltd.	,, ,,	150,000,000
Tohshin Warehousing Co., Ltd.	,, ,,	15,000,000
The Oji Paper Mill Co., Ltd.	,, ,,	50,000,000
The Shibaura Engineering Works	,, ,,	20,000,000
The Mitsui Trust Co.	,, ,,	30,000,000

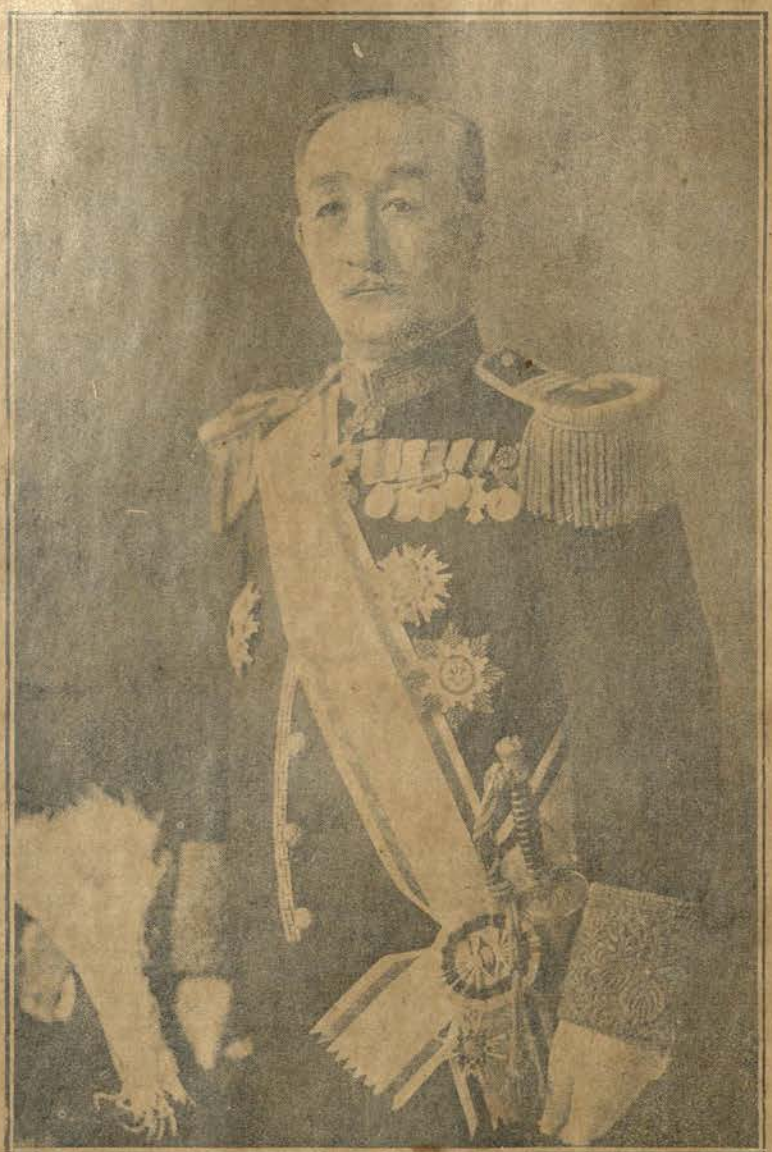
In addition to the above Messrs. Mitsui have a large interest in many other industrial undertakings including Financial Organisations, Steamship and Insurance Companies, Mines and Agricultural concerns.

Formation of the Toyo Menka Kaisha, Ltd.

The abnormal expansion of the Mitsui concerns and undertakings during the period of the Great War called for some radical changes in the system of their extended operations and their principal departments, *viz.*, cotton, yarn and piecegoods were separated and reorganised in 1920 under the name and style of "Toyo Menka Kaisha, Ltd" (*i.e.*, The Oriental Cotton Trading Co., Ltd.), with a capital of Yen 25,000,000. The new organisation made further progress resulting in important trade developments in India, their first Manager for Bombay being Mr. K. Tsukada, whose portrait appears on page 601. The Head Office of the "Toyo" Company is situated in Osaka (Japan) with branches in all parts of the world, their business comprising raw cotton, yarn and piecegoods not only from India, Burmah and Japan but from China, America, Egypt, East Africa, Manchester and other important trade centres.

An idea of the extent of the business of Messrs. Toyo Menka Kaisha Ltd., in India, can be gathered from the large number of branches and agencies they possess in addition to the extensive operations at the Head Office in Bombay. There are branches and agencies in Calcutta, Karachi, Nagpur, Wardha, Amraoti, Akola, Khamgaon, Khandwa, Dhulia, Jalna, Broach, Surat, Viramgam, Wadhwan, Montgomery, Lyallpur, Multan, Amballa, Chendausi, Hathras, Gadag, Coimbatore, Tirupur, Dindigul, Tuticorin, etc., with more than 170 sub-agencies all over the country and a large number of Indian staff totalling about 400, who look after the business of the firm.

Thus while the name of "Mitsui" signifies a successful and prosperous firm in all parts of the world, the affiliated house of "Toyo" also indicates an extensive and flourishing business, especially in the cotton trade of British India.



BARON MITSUI.

Present President of Mitsui Gomei Kaisha.

Cotton Exporting Firms in Bombay.

THE export trade in cotton has formed the chief source of revenue and prosperity for the majority of the leading mercantile houses in Bombay. The European firms handled the bulk of the export trade until the arrival of the Japanese shippers about the year 1896. The export since then has been substantially diverted for the cotton required for the Chinese and Japanese factories, the present shipment of bales to Japan exceeding those of any other country outside of India. While there are several Japanese firms and agencies in Bombay City the whole of the cotton purchase for Japan is in the hands of two firms who ship it to that country and sell it to the spinners who hedge their purchases in the sampin market.

There have been no ginning factories in the city but several cotton presses existed in former years at Colaba of which some were destroyed by fire or sold while a few have now been removed near the new Cotton Depot at Sewree including the New Prince of Wales Press belonging to Messrs. Forbes, Forbes Campbell & Co., Ltd., the Fort Press and the Chanda Ramji Press. Ginning and pressing is however now carried on extensively in all cotton-growing centres, the nearest to Bombay being the Gujrat and Khandesh districts. Many of the large export houses in Bombay, including the Japanese firms, have their own ginning and pressing factories. The Bombay millowners have also found it advantageous to have their own ginning factores including Messrs. Tata Sons, Ltd., Nowrosji Wadia & Sons, H. M. Mehta & Co., Mulraj Khatau, Moolji Jaitha & Co., the Jamshed Mills Co., and the Madhowji Dharamsey Manufacturing Co., Ltd.

Cotton Exporting Firms in Bombay.

Amersey Damodar & Co.
Amersey & Sons.
Bombay Co., Ltd.
Breul & Co.
Birla Bros. Ltd.
Cursetji Bomanji & Co.
Curumsey Damsee & Sons.
Chachaty and Thakersey, Ltd.
P. Chrystal & Co.
David Sassoon & Co.
E. D. Sassoon & Co., Ld.
E. Spinner & Co.
N. Fatheally & Co.
Forbes, Forbes Campbell & Co., Ltd.
Gill & Co.
Gosho Kabushiki Kaisha, Ltd.
Goculdas Dossa & Co.
Gobhai Karanjia, Ltd.
Hukmichand Rambhagat & Co.
Hirji Nensey & Co.
Italindic Cotton Co., Ltd.
J. A. Begbie & Co.
James Finlay & Co., Ltd.
Japan Cotton Trading Co., Ltd.
Japan Trading and Manufacturing Co. Ltd.
Kilachand Deochand & Co., Ltd.
Khimji Visram & Co.
Killick Nixon & Co.
Louis Dreyfus & Co.
Langley & Co.
Latham Abercrombie & Co.
Lyon Lord & Co., Ltd.
H. M. Mehta & Co.
Nanalal Manilal & Co.
Narandas Rajaram & Co.
Ozu-Burin & Co., Ltd.
Patel Cotton Co., Ltd.
Prier deSaone & Co.
Ralli Brothers.
R. D. Tata & Co., Ltd.
Suzuki & Co., Ltd.
Sassoon J. David & Co.
Toyo Menka Kaisha, Ltd.
Textile Products, Ltd.
Volkart Bros.
V. Zollikofer & Co.
Wardhman Bros., Ltd.

It will be seen from the above list that the export of cotton is not confined, as in former years, to the mercantile firms, but is also in the hands of some of the leading millowners of this city. Several of the pioneer houses which were large exporters of cotton have been closed or their business has been transferred to other firms and at the present day we can find few survivors of the old prosperous times when King Cotton reigned supreme over the commercial life of Bombay. The expanse of the trade and industries in various other directions and the development in the manufacturing resources of the city have also been instrumental in diverting investments and financial enterprises in other channels besides cotton exports.

At the same time some of the most prominent citizens are still largely interested in the staple industry in addition to other business connections and reference to them has been made in the biographical sketches and other articles in this publication.

Prominent Cotton Selectors and Brokers.

Amongst the oldest of Bombay citizens who are still actively engaged in the cotton trade is Mr. A. B. Paymaster who has been connected with the firm of Messrs. Mitsui Bussan Kaisha (now Toyo Menka Kaisha) for the last 30 years. Mr. Paymaster is working at present in partnership with Mr. Anandilal Podar in connection with the cotton brokerage business of Messrs. Toyo Menka Kaisha Ltd. He was, however, associated in the early eighties with Messrs. Gaddum & Co. when the latter firm had with them men of the experience of Messrs. Kaikhasro Heeramanek and Peroshaw Marazban, who had made their mark as expert cotton selectors and brokers.

As regards the Japanese firms Sir Phiroze C. Sethna and Mr. Nusserwanji Guzdar have been connected as muccadams with Messrs: Mitsui Bussan Kaisha since 1896 (now Toyo Menka) in addition to several cotton mill Companies in Bombay.

The late Mr. Pestonji D. Patel figured prominently among the large cotton trading firms started in recent years and his untimely death in 1924 deprived the city of one of its most enterprising and successful cotton merchants and capitalists. Mr. Patel was the first Indian to be elected as a member of the New York Cotton Exchange in 1923.

Among other prominent Parsis in the cotton trade we may include the late Mr. Sorabji Nicholson who had been connected with the firm of Messrs. Bruel & Co. from its early days and whose son Mr. Kaikhasro Nicholson is now the principal partner, Mr. Augustus Bruel having retired and died in England in January 1927.

We may also recall the names of the late Mr. Maneckji Nanporia and Mr. Ardeshir Dastur Kamdin in connection with the Petit Mills. Mr. Furdoonji Mulla Pheroz was muccadum to Messrs. F. Sanquet & Co. with Mr. Hormusji Kasinath, while Mr. Ardeshir Chinoy, who died recently at Bandra, was cotton selector to Messrs. Knoop & Co., latterly known as Messrs. D. H. Glade & Co.

Japanese Banking and Steamship Companies in Bombay.

Banks:—Yokohama Specie Bank, Ld.
The Mitsui Bank, Ld.
Sumitomo Bank, Ld.
Bank of Taiwan, Ld.

Steamship Companies:—
Nippon Yussen Kaisha.
(Japan Mail Steamship Co.)
Osaka Shosen Kaisha.
(Osaka Mercantile Steamship Co.)

MR. A. B. PAYMASTER.

MR. ANANDILAL PODAR.

THE LATE MR. P. D. PATEL.

THE LATE MR. K. M. HEERAMANECK.

THE LATE MR. P. M. MARAZBAN.

SOME PROMINENT COTTON BROKERS AND MERCHANTS.

Yarn and Cloth Labels of Bombay Mills.

It was in 1877 that the Bombay Millowners' Association sent a representation to the Government of Bombay urging the necessity for an Act providing for the registration of Trade Marks in India. After some time Government forwarded a copy of an all-India Bill for the purpose of such registration. The Bill proposed that the Registrar's Office should be located in Calcutta, and that the High Court of Judicature at Calcutta should be appointed the Court for the purposes of the Act. The Bombay Millowners' Association, in offering their comments on the different provisions of the Bill, recommended that the Registrar should have a Sub-Registrar acting under him in Bombay, and that the Bombay High Court should be appointed a Court for the purposes of the Act in this Presidency. A letter was, however, addressed in 1881 by the Government of India to the Association stating that the Select Committee of the Legislative Council had come to the conclusion that the registration in India of all English Trade Marks used or likely to be used in India appeared to them so formidable an undertaking that they were reluctant to adopt any course which would necessitate it so long as there was a prospect of finding any simpler solution of the question, and this solution as suggested by Government was that Indian manufacturers should register their Trade Marks in England. The Committee of the Association protested strongly against this suggestion and expressed the opinion that if the original scheme of the Bill could not be adhered to, and if the registration could not be carried out in India, the proposed legislation should, in the interests of Indian manufacturers, be abandoned.

Registration of Mill Labels.

Nothing has since been undertaken by the Indian Government in regard to Trade Marks and Labels but the Bombay Millowners' Association had arranged in 1886 that all members should register in the books of the Association all the Trade Marks, Stamps, Tickets and Labels which they claimed, and that all disputes in connection therewith was to be referred to arbitration. Certain simple rules were adopted in connection with this matter, and the registration or recording has been continued up to the present day in the office of the Millowners' Association in Bombay.

It should be noted that the yarn labels or tickets formed the specialities of the various spinning mills in Bombay whose productions were in great demand in the Chinese markets in former years. A group of fishes, serpents, scorpions, cockroaches, crocodiles, lizards, frogs, birds and figures of the Chinese and Japanese female workers in tea gardens were among the favourite designs for the Chinese markets.

The yarn and cloth labels or marks for other markets have also been intelligently and suitaby designed in recent years while block figures, after the style of those used on British-made piecegoods, have found favour among the dealers and consumers of the productions of the local factories.

The labels or marks of several of the well-known cotton mills have been imitated and infringed and law-suits have been filed by prominent mill Agents like Messrs. Tata Sons, Ltd., resulting in the conviction of the infringers. A few of the more popular and artistic labels have been reproduced in these pages.

THE EDWARD SASSOON MILLS.

THE COORLA MILLS.

[Copyright.

SOME POPULAR MILL LABELS.

SOWING.

HOME INDUSTRY.

THE SPINNING WHEEL.

THE PICKETING AGAINST DRINK.

A LIQUOR SHOP IN BOMBAY.

[Copyright.

Including : Meyer Sassoon, Sassoon United, and the Jacob Sassoon Mills.

SOME POPULAR MILL LABELS

Patents, Designs and Trade Marks.

Trade Marks.

THERE is no Trade Marks Act in India corresponding to the English Act. Trade Marks and Labels of British and Continental exporters and Indian millowners and manufacturers may, however, be recorded by registering the declaration of claim in the Sub-Registrar's office together with the mark or label. In case of infringement or dispute, this will serve as evidence of prior use and date but it cannot have the status of a Registered Trade Mark as in England. Protection for a Trade Mark can also be obtained under the Indian Merchandise Marks Act which enacts certain sections of the Indian Penal Code and provides that a mark used for denoting that goods are the manufacture or merchandise of a particular person is called a trade mark, and the expression 'trade mark' includes any trade mark which is registered in the Register of trade marks kept under the British Patents, Designs and Trade Marks Act, 1883, and any trade mark which, either with or without registration, is protected by law in any British possession or foreign State to which the provisions of this Act, are applicable.

The Indian Penal Code also provides that a mark used for denoting that moveable property belongs to a particular person is called a Property Mark.

Designs.

New and original Designs, not previously published in British India, can be registered by the owner in India and the copyright in them will continue for five years from the date of Registration. It may, however, be renewed for two further periods of five years each on payment of renewal fees. Designs are registered under different classes according to the nature of the articles to which they are applied.

Patents for India.

Several amendments have been made in the Indian Patents and Designs Act of 1911, the most important being the priority given to Indian inventors over others to apply for British patents within 12 months from the date of the Indian application. Similarly, an applicant for a British patent has priority over other applicants in India for 12 months from the date of his British application.

An application for an Indian Patent must be made in the proper form and accompanied by a specification. Drawings are necessary, and should be prepared according to the required size and style and sent with the specification. If the papers are in order and the invention is *prima facie* new, the application will be accepted within six to eight weeks. The specification and the drawings will then be published and, if within three months there is no opposition, the patent will be granted. If it is opposed by any person on the ground, among others, that the applicant obtained the invention from him or that it was not new, the Controller will hear both sides and decide on the case. The patent, when granted, will continue for 14 years from the date of filing the application, subject to the payment of renewal fees. The first renewal fee of Rs. 50 is not, however, payable till before the end of the fourth year from the date of the application.

Caution to Indian Inventors.

The invention may be used in India, without prejudice to the patent rights, after the acceptance of the application, but an inventor wishing to secure a British Patent must apply for it within 12 months from the date of his Indian application. Similarly, if he wishes to secure patents in America, France, Germany or in any other foreign country, he must file his applications in these countries before his invention is made known or published in India, because no other country, except Great Britain, will give priority to Indian patent applications under the reciprocal arrangement.

The Value of a British Patent.

Unless the invention is exclusively suitable for India it will be advisable to apply simultaneously for a British Patent, because the exhaustive search that is made into prior specifications by the Patent Office in London enables the Indian inventor to estimate the value and novelty of his device at a reasonable outlay. For it must be remembered that an Indian Patent is granted subject to the condition that the invention was not previously published in India. The practice, however, is to send copies of British specifications to India, and if one of these specifications is similar to the specification of the Indian inventor, and if the copies had arrived in India before the date of his application, his Indian Patent will be affected or become void. Hence, it is safe to apply for a British Patent and to know the value and novelty of the invention before laying out capital for its working.

Application for British Patent.

An application for a British Patent must be accompanied either by a provisional or a complete specification ; the former gives protection for nine months, before the end of which the specification must be filed.

If the invention has been tested or is otherwise considered good, a Complete Specification may, with advantage, be filed along with the application. This will not only expedite the completion of the patent, but may save disappointment and further expenditure, because the Complete Specification enables the Patent Office to make a search into the novelty of the invention and, as the applicant is informed of the result, he can estimate its value by what has been done before.

If the invention is not anticipated, the specification will be accepted within from eight to ten weeks. It will then be published and open to opposition ; if there be no opposition within two months, the British Patent will be granted and will continue for 16 years from the date of application subject to payment of renewal fees. The first renewal fee is not, however, payable till before the end of the fourth year from the date of the patent.

British Patent gives Protection in Other Countries.

It must be noted that an application for patent in Great Britain gives temporary protection (12 months) under the International Convention in other British possessions and the Colonies and in certain other countries, including America, Italy, France, Germany and Japan, and *vice versa*.

No other country, however, except England, gives priority to Indian inventors, whose safest course would be to apply either simultaneously for patents in England, America, Germany, France and other countries or immediately after the British application is ready for acceptance.

The above particulars have been abstracted from a pamphlet on " Inventions : and How to Patent Them" published by Messrs. M. C. Rutnagur & Co., Patent Agents, Bombay.

Dye and Colour Manufacturers and Importers.

The importation into India of aniline and alizarine dyes by German manufacturers since the year 1893 has opened out a new and remunerative market for the products of the cotton mills in Bombay. For several years the bulk of the business was in the hands of Messrs. Leopold Cassella & Co. of Frankport and the Badische Aniline and Soda Fabrick, Ludwugshafen, whose laboratories in Bombay afforded considerable facilities to the staff of the millowners and others who were anxious to study the dyeing of cotton yarns and fabrics on a commercial scale. Other German manufacturers also entered the field and almost up to the declaration of war in 1914 the stock of the dyes and dyestuffs was almost wholly indented from Aniline and Alizarine Works in Germany. But the stoppage of supplies during the war period encouraged some of the more influential of the Swiss firms in Bombay to undertake the importation of dyestuffs. The British Dyes Corporation, Ltd., which traded in those days under the style of British Dyes, Ltd., also began to compete with the foreign importers through their Indian representatives, Messrs. Duncan Stratton & Co. The prices were kept up at a high and speculative rate and further agencies were opened out including Messrs. Latham Abercrombie & Co. who represented The British Alizarine Co., Ltd. Then came the share of the Reparation Dyes which were distributed throughout India by Messrs. Killick Nixon & Co., with the assistance of the various provincial Departments of Industries.

After the cessation of the war the American colour manufacturers tried to secure business in the Indian markets and as Bombay was the principal centre for the trade, the National Aniline Chemical Company of New York opened its head office in this city as also the firm of Messrs. Dupont d Nemours while the New Port Aniline Company began business through their Agents, Messrs. R. J. Mistry & Co.

The Swiss dye manufacturers also began to compete with the imports from Germany and the Society of Chemical Industry of Switzerland appointed Messrs. Tabbasso Voltera as their Bombay agents while Messrs. Volkart Bros. represented Messrs. Sandoz Chemical Works of Basle and Mr. Adasland Forleaf looked after the interest of Messrs. Geigy of Basle.

The old-established Indian firms such as Messrs. Pragji Soorji & Co., Dadaji Dhakji & Co., Gurdit Singh Gulab Singh & Co., Soorji Vallabhdas & Co., Manilal Moolji & Co., Daulatram Kashiram & Co., and Kabur & Co., had worked up and established their own labels and packings throughout the country, and were obtaining colours and dyestuffs for the Indian markets from various European and American manufacturers during the continuance of the war and after peace was declared.

It will be seen that the competition among the German importers themselves was keen and distributed among well-known manufacturers. The Swiss manufacturers were also influentially represented and to add to that the British Dyestuff Corporation, Ltd., and the British Alizarine Co., Ltd., formed a combination of their interests and appointed Messrs. Wilson Latham & Co., Bombay, as their agents for India. Messrs. I. B. Holliday also started their own branch in Bombay.

Agents of German Manufacturers.

The German manufacturers also sent out their own Agents after 1920 and gradually reorganised the business at the head offices in Bombay and appointed the following representatives :—

Maurice Suter & Co.	for	Badische Aniline & Soda-Fabrik.
Continental Colour Co.	,,	Leopold Cassella & Co., and Farbwerk Muehlheim Vorm A. Leonhardt & Co.
Gorio Ltd.	,,	Farbenfabriken vorm Friedr Bayer & Co.
Colour & Drug Co., Ltd.	,,	Farbwerk vorm Meister Lucius.
Havero Trading Co., Ltd.	,,	Aktiengesellschaft fuer Anilinfabrikation, Chemische Fabrik Griesheim-Elektron, and Chemische Fabriken vorm Weilerter-mer.
G. Kippax & Co.	,,	Berlin Anilin (Agfa).
Tricumdas Karsondas & Co.	,,	Weiler Ter-Meer.
R. J. Mistry & Co.	,,	Bruening Hochest and Kalee & Co.
Shoorji Vallabhadas & Co.	,,	Chemische Fabric Grieshein-Elektron.

British Dyes and Colour Manufacturers.

The first dyestuff to be discovered and made synthetically was in England by an English chemist in 1856. This was the mauve of W. H. Perkin. Magenta followed close upon mauve and in 1860 the firm of Messrs. Read Holliday & Sons was already manufacturing it in quantities sufficient for export, and it is claimed that some of this magenta was the first synthetic dye to reach India. Several other firms took up the manufacture of various dyes at this exciting stage of rapid development, but Holliday's were pioneers in the distillation of coal-tar and the manufacture of aniline and had been for years the leading firm in these lines ; they were therefore in an advantageous position for following up the development of colour and took out patents for various discoveries from 1860 onwards. In 1914, however, the war not only caused all development work to cease for a time, but brought about a profound change in the outlook. It revealed to other nations besides Germany, and particularly to England, that the dyestuff industry was not only a key industry, vitally important, for example, to the relatively much larger textile industries, but was also a most valuable national asset and a school of chemistry leading to developments in many other directions. A survey of the history of the synthetic dye industry shows that its recent development in British hands is no new thing, but rather a re-awakening of fresh life and activity of the original source and natural home of the industry, or as it were a re-awakening of an old romance. This is not to say that the manufacture of dyes in England had ceased at any time since the earliest days ; there has always been manufacture on a considerable and efficient scale, but in recent years it has been overshadowed in volume by Germany and Switzerland where the national significance of the industry was fully recognised.

Messrs. L. B. Holliday & Co., Ltd., who have been in the business for almost three-quarters of a century and are one of the oldest firms in the dye manufacturing business were competing successfully with German monopolists before the war. In the early years of the war, the old Holliday Works was merged into what is now known as the British Dyestuff Corporation, Limited. Major Holliday, realizing what the name "Holliday" meant to the dyestuff consumers of the world, formed the present firm of L. B. Holliday & Company, Limited, which had the advantages of a new plant erected and fitted with the latest scientific equipments and based on the family's experience in the business covering a period of eighty-five years. Thus, the name "Holliday" has been connected commercially with dyestuffs since their discovery. They have put upon the market ranges of every known class of dye and include in their range not only the ordinary Substantive and Acid dyes for wool and cotton and practically complete ranges of Basic colours, Azo Chrome colours, Oil Soluble colours, Fur dyes, etc., but also a steadily increasing range of the fastest dyes known to modern science in the Anthraquinone Acid dyestuffs for wool and the Anthraquinone Vat dyestuffs for cotton.

American Dyes and Colours.

The Bombay office of Messrs. E. I. du Pont de Nemours & Co. was opened in February 1924 and the du Pont colours were first introduced to India in that year. They are suitable for the cotton mills and are sold only in bulk direct to the factories. The most important of this is sulphur black, but recently fast to bleach colours have also been introduced as well as direct colours suitable for the bazar trade, the latter being sold to the large repackers as Messrs. du Pont have not as yet established a repacking plant in Bombay.

The National Aniline and Chemical Company, U.S.A., opened their business in Bombay in 1919 through their representative, Mr. A. W. Ogdale, their interest in previous years being looked after by Messrs. Pragji Soorji & Co. The present business consists in the importation of sulphur black which is the principal line for the cotton mills as also the direct colours.

Combination of German Manufacturers.

The dyestuff industry has thus been making rapid progress in Bombay and a very large quantity of dyes, chemicals and other by-products is being regularly imported into this country from manufacturers in Germany, America, England and other places to meet the demand. Competition has been keen after the war with the result that prices are coming down steadily. In order to make their selling organisation still more competitive and in order to stabilise this industry, a new corporation or combination has been formed comprising the former German dye importers with a view to place on the market the dyestuffs of German manufacture at cheaper rates.

The following Bombay companies used to import the production of the various German works up to the end of 1925:—

Maurice Suter & Co.—Badische Aniline & Soda-Fabrik, Ludwigshafen o/Rh.

Continental Colour Co.—Leopold Cassella & Co., G.m. b.H., Frankfort o/M. and Farbwerk Muehlheim vorm A. Leonhardt & Co., Muehlheim o/M.

Colour & Drug Co., Ltd.—Farbwerke vorm Meister Lucius & Bruening Hoechst o/M. and Kalle & Co., Aktiengesellschaft, Biebrich o/Rh.

Gorio Ltd., Dyes Department.—Farbenfabriken vorm Friedr Bayer & Co., Leverkusen o/Rh.

Havero Trading Co., Ltd.—Aktiengesellschaft fuer Anilinfabrikation, Berlin; Chemische Fabrik Griesheim-Elektron, Frankfort o/M. and Chemische Fabriken vorm Weiler-ter-Meer, Uerdingen.

The above firms have been merged since April 1st, 1926, into the Havero Trading Co., Ltd., Aniline Department, Bombay, and this Company will be the sole importing agency in India, Burma and Ceylon for all the dyes and by-products manufactured by Interessen Gemeinschaft Farbenindustrie Aktiengesellschaft in Germany, commonly known as "I.G." The Company proposes to maintain and develop their existing organisations all over the country under the control of the head office in Bombay.

The Germans have been well known for the part they have taken in the development of the chemical industry and they have been responsible for many notable discoveries which have revolutionised the production of dyes. Neither have they been lacking in the various improvements in industrial organisation so as to produce at unusually cheap rates. They were supreme in the trade before the war and now they are trying their best to regain the position they lost on account of the war-time developments in America and England. The Cartel system, so well known in Germany, has now been applied on a gigantic scale to the dye industry and the result has been that all the German dyestuff works have been combined into one with a total capital of 646 million marks, thus representing the heaviest capital concentration for any single industrial enterprise in Germany. The new corporation, the Interessen Gemeinschaft Farbenindustrie Aktiengesellschaft, consists of what were formerly known as Badische Aniline, Friedr Bayer, Meister Lucius and Bruening, Berlin Aniline, Griesheim & Weiler-ter-Meer, Leopold Cassella, Kalle and Leonhardt. Directors Bosch and Duisberg are at the head of this Syndicate.

It has been suggested that competition should be eliminated and costs lowered gradually by assigning to each concern the special production for which its plant is best equipped. The Badische, for example, would confine its manufacture to fixed nitrogen which it is said to have expanded to 400,000 tons (fixed nitrogen, not end-product) since it introduced the Haber-Bosch process of direct Ammonia synthesis at the pilot Oppau plant in 1912, with a production of only 5,000 tons; and to synthetic solvents by new catalytic process such as butanol and some heavy chemicals. The Hoechster Fabwerke, at Hoechst-on-the-Main, would be a likely candidate for the manufacture of dyes; Bayer, Pharmaceuticals; Agfa, Photo-Chemicals with a joint interest in the silk plant, in which the Dye-trust is interested at Berlin-Litchterfelde (so-called "Acetate Silk"); and Griesheim for Electrolytic production, including industrial gases, Hydrogen, Nitrogen, Oxygen and Acetylene, in association with the Vereinigte Sauerstoff Werk G.m.I.H. of Berlin, merging the former Koholyt Co. belonging to Stinnes interests.

Dye Imports from Switzerland.

In former times Switzerland was better known for its mountain scenery than for its manufactures, although its watches and lacework had earned a world-wide reputation. Nowadays, however, the label "Swiss Made" is to be seen on a large number of goods which are being increasingly exported from that country, and of these one of the first places is to be given to colours. Nature has not endowed the land for the manufacture of dyes; there is no coal available, and there being no cokeries, all the intermediaries have to be imported from abroad. Yet the proverbial Swiss skill and cheap hydro-electric power have so developed a chemical industry that Swiss colours are one of the biggest items in its exports. The chemical factories of this country, though not on the same large lines as the German and other concerns to which we have referred, yet are well known for the excellence of their goods and the regularity of delivery.

One of the pioneers of the dyestuff industry in Switzerland is the Society of Chemical Industry of Basle, popularly called "Ciba," which has not only works in the parent country but is allied to companies in other countries as well, and has works in France, Italy, England, America, Poland and Russia. The Society, whose agents in Bombay are Messrs. Tabasso Volterra, Ltd., was originally started in the year 1864 by A. Clavel at Basle; it became known as Bindschedler & Busch in 1873, and the limited liability Company of the present designation was registered in 1885. In the year 1898, the Aniline Colour Works of A. Gerber & Co., Basle, were joined to this body, and in the year 1908 the Basle Chemical Works amalgamated with it. At the present day the company has a share capital of 20 million francs and a debenture capital of another 10 million francs. It is associated with The Society of Chemical Industry in Pabiance, Poland; The Clayton Aniline Co., Manchester; and The Cincinatti Chemical Works, Cincinatti, U.S.A. The parent firm has altogether five works under its direct control, three in Switzerland, one in Italy and one in France; the Swiss works are at Basle, Petit Hunigue and at Monthey; the Italian at Seriate, near Bergamo, while the French works are at St. Fons. The company first started the manufacture of artificial or synthetic indigo at the Monthey works, which produce heavy chemicals by the electrolytic process. The Petit Hunigue establishment was formerly the Basle Chemical Works.

After the war, the Society has not only made many improvements in their manufacturing processes but has also extended their business considerably in foreign countries, and specially in India.

British Cotton Machinery Makers.

The average Mill Agent in Bombay is familiar with the names of the British manufacturers who have supplied him with machinery, combining all the latest improvements, but only in isolated cases has he had the opportunity of coming personally into contact with the men who have built up this great industry, and of inspecting the vast establishments devoted to this special work. A process of absorption has gone on in the trade and the change from private concerns to limited companies has been effected for various reasons—in some cases to facilitate the division of individual partners' interests in case of retirement or death; in others to allow of an extension of capital and expansion of operations which could not have been undertaken while the business remained in private hands. But, while the investing public had been given an opportunity of sharing in the profits of machine-making, the purchaser of machinery had been assured that the direction and control of the concerns with which he had business relations remained substantially in the same hands as before, and that his interests had gained by the change.

In the early days of the industry, when operations were naturally conducted on a comparatively small scale, the various machine-makers were more or less specialists. One made scutchers or scutchers and cards; another, frames, and so on; and to make up his assortment of machinery, the spinner must needs have recourse to several makers. With the increased demand for machinery, and more especially for complete mills for abroad, the machine-maker found it to his advantage to put himself in a position to supply the whole of the machinery from beginning to end, made on his own premises. That is practically the case to-day with all the more important firms.

It is however to be noted that the number of cotton machinery makers in Lancashire has now been reduced to less than half compared with fifty years ago when Bombay millowners began to import their machinery from Great Britain. Most of the larger manufacturers have, however, continued to supply the Bombay mills since that period and their Works have been described from time to time in the columns of the *Indian Textile Journal*.

The Pioneer Machinery Suppliers.

The pioneer spinning and weaving mills which were started in Bombay between 1855 and 1875 were fitted with machinery and power plants by the best known of British makers. The imports of textile machinery and engines, boilers, etc., have continued to increase since that period but the old and reputed makers have been able to secure a substantial share of the business although more than a dozen manufacturers, mostly British, opened out new agencies from time to time in Bombay and secured portions of the orders from the local millowners.

From 1895 onwards the additions to the list of cotton machinery agencies in the city were particularly noticeable along with agencies for engine builders, boiler makers and general mill furnishers, some of the Continental manufacturers being also represented either by local firms or by travelling representatives. The number of cotton mills in Bombay increased to 82 in 1905 compared with 50 in 1885 and there was necessarily a very large increase in the imports of spinning, weaving and finishing machinery with a corresponding increase in engines, boilers and other accessories and appliances. Other industries and manufactures, which

were allied to the textile industry, also made substantial progress and attracted a large number of British manufacturers who had to compete with the older and already established makers and with their Indian agents and representatives. The demand for machinery and millwork increased simultaneously in other parts of the country but the most important and remunerative centre was Bombay city where the head offices and agencies of the British machinery makers and exporters were concentrated.

An idea of the extent of the business and the demand for industrial machinery including cotton spinning, weaving, bleaching, finishing and dyeing, and engines, boilers, electrical machinery, gearing, shafting, fire-extinguishers, humidifiers, sprinklers, mill-stores, workshop tools and other appliances can be gathered from the list on pages 621 to 623 and 629, of British and Continental manufacturers who have had agencies or offices in Bombay. This list represents the advertisers of the *Indian Textile Journal* who have secured the bulk, if not the whole, of the business in machinery and millwork, especially that connected with the textile engineering and electrical industries.

Spinning and Weaving Machinery Suppliers.

The first cotton mill which was started in 1854, *viz.*, the Bombay Spinning Mill, was fitted with machinery by Messrs. Platt Brothers & Co., Ltd., Oldham, while the Oriental Mill which followed, was supplied by the same firm and by Messrs. John Hetherington & Sons of Manchester. As the number of factories increased, other makers in the Oldham and surrounding districts tendered for the orders, among the earliest being Messrs. Dobson and Barlow Ltd., Bolton; Asa Lees & Co., Ltd., Oldham; Taylor Lang & Co., Ltd., Stayley Bridge; Henry Livesey, Ltd., Blackburn; Howard & Bullough, Ltd., Accrington; Brooks and Doxey, Manchester; Butterworth & Dickinson, Burnley; Wm. Dickinson & Sons and William & Mills, Blackburn; Robert Hall & Sons, Bury; Willan and Mills, Blackburn; George Keighley, Ltd., Burnley; William Tatham, Ltd., Rochdale, and Hacking & Co., Ltd., Bury. The mill industry in Bombay made further progress, particularly between 1885 and 1895, during which period the introduction of the Ring Frame and the Flat Cards brought a complete renovation of the preparatory and spinning machinery in existing concerns in addition to the machinery required for the new factories.

Bleaching and Finishing Plants.

The bleaching and finishing plants were also supplied mostly by British makers including Messrs. J. H. Riley & Co., Ltd., Bury; Lang Bridge, Ltd., Accrington; John Downham & Co., Ltd., Bury; William Dickinson & Sons, Blackburn; Mather & Platt, Ltd., Manchester; Sir James Farmer & Sons, Ltd., Manchester; and Thos. Broadbent & Sons, Ltd., Huddersfield.

The Power Plants.

While the Bombay millowners were careful to select the best of cotton machinery available in Lancashire they have been equally careful in the choice of the engines and boilers which were supplied by Messrs. Hick Hargreaves & Co., Ltd., and John Musgrave & Sons, Ltd., Bolton; Galloways Ltd., Manchester; Babcock and Wilcox Ltd., Renfrew; Scott & Hodgson, Manchester; Tinker Shenton & Co., Ltd., Manchester; Benjamin Goodfellow and J. & E. Wood, Bolton; Yates and Thom, Ltd., Blackburn; Marshall Sons & Co., Ltd., Gainsborough; Thomas Beeley, Hyde and Ransome, Sims & Jefferies, Ltd., Ipswich.

The Diesel Oil Engine.

The introduction of the electric drive in a few of the Bombay factories prior to the starting of the Tata Hydro-electric Works was facilitated by the Diesel Engines and Dynamo sets which were found compact and convenient, and one of the earliest to supply these were Messrs. Mirrlees Bickerton & Day, Ltd., Stockport.

Electrical Machinery and Appliances.

The introduction of electricity in the cotton mills of Bombay commenced about the year 1893-94 for lighting purposes. This was found necessary to work the looms overtime on account of an increasing demand for cloth and to illuminate badly lighted rooms and corners which were common in several mills. Arc and incandescent lamps were employed with dynamos on the premises, the earliest mills to adopt this system of lighting being the Manekji Petit Mill, the Western India, the Ripon Mill and the New Great Eastern Mill, being followed within the next two or three years by several other mills. As for the transmission of power by electricity very little was known or in use at the time when the electric light was introduced. A small installation, however, existed in 1894 at the Manekji Petit Mill where a dynamo furnished current to two motors in parallel at a distance of about 200 and 400 feet respectively, the latter operating the feeder parts of the Exhaust openers in the blow-room and the hoist for lifting the cotton bales. Stray attempts were then made to drive certain machines by electricity but no practical impetus was given to the electric driving of machinery in the Bombay cotton mills until Messrs. Tata's Hydro-electric project was matured in 1905 and the advantage of the electric drive were brought to the notice of millowners through the columns of the *Indian Textile Journal* as stated on page 561. This and other publicity given to the electric drive induced mill agents and factory owners in other parts of India to institute enquiries into the probable cost of electric power transmission through generators operated by steam power or by the Diesel engine. The enquiries resulted in reports and information which favoured the electric drive in point of economy, cleanliness and simplicity and during the period 1905 to 1908, while the financing of the large hydro-electric scheme for Bombay was in progress, India was importing electrical machinery on a scale unprecedented in her trade history. Dynamos and motors were introduced in workshops and factories of every description; experimental electric plants were installed in up-country cotton mills with results that proved satisfactory and as a practical instance Messrs. James Finlay & Co., Ltd., projected the Finlay Mills in Bombay in 1908 which was driven entirely by electricity produced on the premises, the designing and equipment being carried out by Messrs. Bradbury Brady & Co., now Messrs. W. H. Brady & Co., Ltd. The Director of Commerce and Industries in his Report on the Trade of India for 1909-10 referred to the increase in the import of electrical machinery and appliances at the period of which we are writing. He pointed out that the value of steam engines imported into the country declined from £ 918,200 in 1908 to £ 723,900 in 1909, while the import of electrical machinery, valued at £ 236,500 in 1909, shewed substantial progress and that a good deal of this electrical plant belonged to the textile industry.

Suppliers of Electrical Machinery.

Among the makers who have supplied electrical generators and motors to the cotton mills in Bombay are Messrs. The Metropolitan-Vickers Electrical Company, British Westinghouse Electrical and Manufacturing Co., Ltd., London; Siemens Brothers Dynamo Works, Ltd., London; English Electric Co., Ltd., London; Mather and Platt, Ltd., Manchester; Fraser and Chalmers Engineering Works, Kent; Hall and Siemens, Dick Keer & Co., Lancaster & Co., British Thomson-Houston Co. (India), Ltd., Rugby; Callender's Cable and Construction Co., Ltd., Bombay; General Electric Co. (India), Ltd.; Henleys Telegraphic Works Co., Ltd., London, and British Insulated and Hensley Cables Ltd., Liverpool.

Mill Accessories and Appliances.

A large quantity of spinning and weaving accessories and stores continued to be imported mostly from England, for many years, the early suppliers of the principal articles being as under :—

Bobbins and Shuttles :—Messrs. Henry Livesey, Ltd., Blackburn; Wilson Bros. Ltd., Todmorden; Wilson & Co., Barnsley, Ltd., Barnsley; Kirk & Co., Ltd., Blackburn; John Dixon & Sons, Ltd., Keighley.

Card Clothing:—Messrs. Joseph Sykes Bros., Huddersfield; Wilson & Ingham, Yorkshire; Samuel Law & Sons, Ltd., Cleckheaton; John Whiteley & Sons, Ltd., Halifax; Horsfall & Bickham, Ltd., Pendleton; James Walton & Sons, Manchester.

Belting :—Messrs. Henry F. Cockhill, Cleckheaton; Fleming Birkby Goodall, Ltd., Halifax; John Tullis & Sons, Glasgow; J. Meredith Jones & Sons, Manchester; J. Ormerod & Sons, Castleton.

Sprinklers and Fire Pumps :—Messrs. Dowson Taylor & Co., Ltd., Manchester; Witter & Sons, Bolton; George Mills & Co., Radcliffe; Merryweather & Sons, Ltd., London.

Hydro Extractors :—Messrs. Manlove Alliott & Co., Ltd., Nottingham.

Sizing Materials :—Messrs. The Sizing Materials Co., Manchester; James Eastwood, Manchester.

Reeling :—Messrs. Joseph Stubbs, Manchester; Thomas Holt & Sons, Rochdale.

Ventilating :—Messrs. Blackman Ventilating Co., Ltd., London; Mathews & Yates Ltd., Swinton.

Card Grinding :—Messrs. Dronsfield Bros., Ltd., Oldham; Luke & Spencer, Ltd., Broadheath.

Dobbies :—Messrs. Lupton & Place Ltd., Burnley; Ward Bros., Blackburn; Lupton Bros., Ltd., Accrington.

(For other Manufacturers who supply the Bombay Mills see pages 621, 622, 623 and 629.)

Machinery Business with India.

THE following Makers* of textile, engineering and electrical machinery and mill accessories have been supplying the requirements of the Bombay cotton mills and other factories :—

British Manufacturers.

Andrew Machine Construction Co., Stockport.
Angus, George, & Co., Ltd., Newcastle-on-Tyne.
Arundel, Coulthard & Co., Ltd., Stockport.
Asa Lees & Co., Ltd., Oldham.
Astley, J. & R., Ltd., Blackburn.
Automatic Sprinkler Co., Ltd., London.
Babcock & Wilcox, Ltd., Renfrew.
Baldwin & Heap, Ltd., Burnley.
Bancroft & Co., Blackburn.
Barber & Colman, Ltd., Brooklands.
Barlow, H. B., & Hocknell, Ltd., Huddersfield.
Barrow Hæmatite Steel Co., Ltd., Barrow in Furness.
Barrow, Hepburn & Gale, Ltd., London.
Bell's United Asbestos Co., Ltd., London.
Berry, Henry, & Co., Ltd., Leeds.
Berridge, I. L., & Co., Ltd., Leicester.
Birch, Wm. (Engineers), Ltd., Bolton.
Blackman Export Co., Ltd., London.
Blackburn, George, & Sons, Ltd., Nottingham.
Bodden, William, & Sons, Ltd., Oldham.
Bolton's Super Heater Co., Stockport.
Booth, John, & Sons, Bolton.
British Dyestuffs Corporation, Ltd. (Manchester).
British Northrop Loom Co., Ltd., Blackburn.
British Thomson-Houston Co., Ltd., Rugby.
Broadbent, Robert, & Sons, Ltd., Stalybridge.
Broadbent, Thos., & Sons, Ltd., Huddersfield.
Brooks & Doxey (1926), Ltd., West Gorton, Manchester.
Bromley, Thomas, & Sons (Pickers), Ltd., Bolton.
Brotherton & Co., Ltd., Leeds.
Brunner Mond & Co., Ltd., Manchester.
Butterworth & Dickinson, Ltd., Burnley.
Burmah Oil Co., Ltd., Glasgow.
Caird & Rayner (Limehouse).
Callender's Cable & Construction Co., Ltd., London.
Card Clothing & Belting, Ltd., Cleckheaton.
Carrier Engineering Co., Ltd., London.
Carter Bros. (Rochdale), Ltd., Rochdale.
Chas. H. Pugh, Ltd., Birmingham.
Clark Sprinkler Co., Ltd.
Cleworth Wheal & Co., Castleton.
Climax Engineering Co.
Cobden Chadwick, Oldham.
Cochran & Co., Ltd., Annan.
Cockhill, H. F., & Sons, Ltd., Manchester.
Critchley, Sharp & Tetlow, Ltd., Cleckheaton.
Crossley, William, Failsworth.
Crossley Bros., Ltd., Manchester.
"Coventry" Chain Co., Ltd., Coventry.
David Bentley, Ltd., Manchester.
David Bridge & Co., Ltd., Castleton, Manchester.
Dawson Manufacturing Co., Oldham.
Devoge & Co., Manchester.
Dickinson, William, & Sons, Blackburn.
Dicks Asbestos Co., Ltd., London.
Dixon, John, & Sons, Ltd., Steeton, near Keighley.
Dobson & Barlow, Ltd., Bolton.
Douglas Fraser & Sons, Ltd., Arbroath.
Duckworth, A., & Sons, Ltd., Rochdale.

*Abstracted from the *Indian Textile Journal*, Bombay.

Downham, John, & Co., Bury.
Dronsfield Bros., Ltd., Oldham.
Eadie Bros. & Co., Ltd., Manchester.
Eastern Chemical Co., Ltd., England.
Edge, William, & Sons, Ltd., Bolton.
Eastwood, James, & Sons, Manchester.
Edward Jennings, Lurgan (Ireland).
Elijah Ashworth, Manchester.
Elton Cop Dyeing Co., Ltd., Bury.
English Electric Co., Ltd., London.
Farrar, J. B., & Sons, Ltd., Halifax.
Fawcett, Preston & Co., Ltd., Liverpool.
Fenner, J. H., & Co., Ltd., Hull.
Ferranti, Ltd.
Fleming, Birkby & Goodall, Ltd., Halifax.
Foamite Firefoam, Ltd., London.
Foster, Joseph, & Sons, Preston.
Francis Harris & Co., Stoke-on-Trent.
Galloways, Ltd., Manchester.
Gandy Belt Mfg. Co., Cheshire.
General Electric Co., Ltd., London.
Goodbrand & Co., Ltd., Stalybridge.
Green, E. & Son, Ltd., Wakefield.
Greenwood & Batley, Ltd., Leeds.
Glenfield & Kennedy, Ltd., Kilmarnock.
George Hargreaves & Sons., Ltd., Blackburn.
Gum Farinol Co., Stockport.
Hacking & Co., Ltd., Bury.
Hall, Robert, & Sons (Bury), Ltd.
Hardaker, John T., Ltd., Bradford.
Hardman Ingham & Dawson, Ltd., Oldham.
Harling & Todd, Ltd., Burnley.
Harrap, W. H., & Sons, Manchester.
Harap & Wilkinson, Ltd., Salford.
Hattersley, Geo., & Sons, Ltd., Keighley.
Haydock, James, Ltd., Blackburn.
Healey Bros., Ltd., Heywood.
Henley's Telegraph Works Co., Ltd., W. T., London.
Henry Livesey, Ltd., Blackburn.
Herbert Morris, Ltd., Loughborough.
Hetherington, John, & Sons, Ltd., Manchester.
Hibbert, Joseph, & Co., Ltd., Darwen.
Hick, Hargreaves & Co., Ltd., Bolton.
Hodgkinson, J., & Sons.
Holden, Francis, & Sons, Clitheroe.
Hopkinson, J., & Co., Ltd., Huddersfield.
Horsfall & Bickham, Ltd., Pendleton.
Howard & Bullough, Ltd., Accrington.
Hunt & Moscrop, Ltd., Middleton.
Hutchinson, Hollingworth & Co., Ltd., Dobcross, Yorks.
Ingersoll Rand, Ltd.
Jacks, William, & Co.
Jessop & Co., Ltd.
Jackson & Brother, Ltd., Bolton.
James Nuttall, Castleton.
John Hall Bobbin Co., Ltd., Oldham.
John Lord, Ltd., Bacup (Eng.).
John Thomson (Wolverhampton), Ltd., Wolverhampton.
Kay & Wilkinson, Ltd., Bury.
Kaye, Joseph, & Sons, Leeds.
Kenyon, James, & Son, Ltd., Bury.
Keighley, George, Ltd., Burnley.
Kershaw, Hugh, & Sons, Ltd.
Kirk & Co. (Blackburn), Ltd., Blackburn.
Lang Bridge, Ltd., Accrington.
Lazard Godchaux Co., Ltd., London.
Lewis & Tyler, Ltd., London.
Lister, Joshua & Sons, Ltd., Mirfield (Yorks).
Livesey and Crowther, Ltd., Manchester.
Longclose Engineering Co., Ltd., Leeds.
Lord Brothers, Todmorden.
Lord, R., & Son, Bury.
Lund, T., & Son, Bingley.
Lupton Bros., Ltd., Accrington.
Lupton & Place, Ltd., Burnley.
Marshall, Sons & Co., Ltd., Gainsborough.
Mather & Platt, Ltd., Manchester.
Mills, George, & Co., Ltd., Radcliffe.
Mirrlees, Bickerton & Day, Ltd., Stockport.
Moncrieff, John, Ltd., Perth.
Musgrave, John, & Sons, Ltd., Bolton.
Nahums Union Mills, Manchester.
Naylor, John, & Son, Ltd., Dudley.
Noton, S., & Sons, Oldham.

Ormerod, J. & W. H., Ltd., Denton.
Ormerod, John, & Sons, Ltd., Castleton, Manchester.
Parsons, C. A., & Co., Ltd., Newcastle-on-Tyne.
Pearson Garforth, Ltd., Bradford.
Peers Knowles, Accrington.
Pemberton & Sons, Ltd., Burnley.
Petrie and McNaught, Ltd., Rochdale.
Philipson & Co., Ltd., Bolton.
Pilkingtons, Ltd., Heywood.
Places Dobbys, Ltd., Whalley.
Platt Brothers & Co., Ltd., Oldham.
Pollit & Wigzell, Ltd., Sowerby Bridge, Yorks.
Premier Gas Engine Co., Ltd., Sandiacre, Nr. Nottingham.
Ransomes, Sims & Jefferies, Ltd., Ipswich.
Redfern, S., & Co., Ltd., Manchester.
Richard Leeming & Sons, Blackburn.
Richardson Tuer & Co., Fanworth.
Riley, J. H., & Co., Ltd., Bury.
Robert Barker, Ltd., Heywood.
Roneo, Ltd., Bombay.
Royles, Ltd.
R. & J. Marx, London.
Ruston & Hornsby, Ltd., Lincoln.
Ryder, William, Ltd., Bolton.
Samuel Ledray & Sons.
Samuel Pollitt & Sons, Pendelbury.
Samuel Walker & Sons, Ltd., Leeds.
Schofield, Wm., Oldham.
Scott & Hodgson, Ltd., Manchester.
Selson Engineering Co., Ltd.
Smethurst Herbert & Sons, Ltd., Hollinwood.
Stewarts & Lloyds, Ltd. (Bombay Branch).
Stockton & Bunn, Ltd., London.
Stott, Walker & Carruthers, Manchester.
Stubbs, Joseph, Ltd., Manchester.
Sutcliffe (of Crumpsall), Ltd., Manchester.
Sykes & Oilver, Ltd., Littleborough.
Tatham, Wm., Ltd., Rochdale.
Taylor, Lang & Co., Ltd., Stalybridge, England.
Taylor, John, & Sons (Bolton), Ltd.
Taylor, James, & Sons, Ltd., Cleckheaton.
The Ruberoid Co., Ltd., London.
Thomas Hardman & Sons, Ltd., Bury, Manchester.
Tinker, Shenton & Co., Ltd., Manchester.
Tomkinson, John, & Co., Ltd., Manchester.
Tullis, John, & Son, Ltd.
Turbine Furnace Co., Ltd., London.
Turner Bros., Ltd., Rochdale
Universal Winding Co., Manchester.
Vaughan, W. Sampson, & Co., Liversedge.
Wakefield, C. C., & Co., Ltd., London.
Walker, Wm., & Sons, Ltd., Bolton.
Walrus Fibre Mfg. Co., Ltd., Rochdale.
Wallwork, Henry, & Co., Ltd., Manchester.
Walworth International Co. (Calcutta Branch).
Ward Bros (Blackburn), Ltd.
White, Child & Beney, Ltd., London.
Whiteley Bros., Huddersfield.
Whiteley, Wm., & Sons, Ltd., Huddersfield.
Whitehead, R. R., & Bros., Ltd., Oldham.
Whiteley, John, & Sons.
Wilcock Bros., Ashton-under Lyne.
Wildt & Co., Ltd., Leicester.
Wiley, James, & Sons, Ltd., Darlaston.
Wilkinson, V., & Sons, Ltd., Heysham, England.
Willan & Mills, Blackburn.
William Haynes, Manchester.
Wilson and Longbottom, Ltd., Barnsley.
Wilson Bros. Bobbin Co., Ltd., Liverpool.
Wilson & Co., Ltd., Barnsley.
Worthington-Simpson Ld., London.
Yates & Thom, Ltd., Blackburn.

Exports of British Textile Machinery in 1926.

DURING the year 1926 textile machinery to the value of £9,957,439 was exported from Great Britain and this was in a period of bad times. The electrical machinery industry, which was very busy, came next with £5,817,070. The values of other machinery-making industries were: Agriculture £1,450,757, and prime movers, not electricity, £4,723,473; generators and motors, £5,817,070; and machine tools, £1,534,750.

The biggest decline in the exports of textile machinery occurred in the case of spinning, the weight being 75,392 tons in 1926, against 92,186 tons in 1925. In weaving and preparatory machinery 21,575 tons were exported during the year, compared with 25,607 tons in 1925 and 20,086 tons in 1924.

Shipments to India, Russia, China and Japan.

The biggest market during the year was India, to which 23,065 tons were shipped compared with 34,075 tons in 1925.

The second largest market during the year was Russia, to which country was shipped 15,225 tons against 1,861 tons in 1925 and 877 tons in 1924. This has been the outcome of orders which were given by the Russian Textile Syndicate to Lancashire machinists at the end of 1925 and the beginning of 1926. These orders have not yet been completed, but it is hoped that the remainder of those not yet executed will have been shipped by the end of April, 1927. Negotiations are again being carried on for fresh orders, and the Russian textile delegates are still in this country for that purpose. At the time the previous orders were booked arrangements were being made for long credits, some of the payments being made in cash at the time, and the credits extended for 9, 12, and 18 months. Lancashire machinists have had no difficulty regarding subsequent payments, which were made at the due date. The Russians realise that the progress of their industry would be retarded for some time to come if they defaulted.

The striking fact about the 1926 trade is that both China and Japan increased their bookings as compared with 1925. The unsettled state of China naturally greatly affected business, but 1,933 tons were shipped to that troubled country. In the case of Japan 6,960 tons were sent against 3,808 tons in 1925, but the 1924 figure was considerably higher with 8,943 tons.

European markets were depressed throughout the whole year. In the case of the Netherlands there was the epidemic of mill construction in 1925 which accounted for the high figure of exports, 11,517 tons, but during 1926 the figure of 8,819 tons was high in comparison with that of 1924, which was 3,855 tons. A great deal of machinery sent to Holland was delivered in the early months of the year, the orders booked in 1925 probably accounting for the overplus during 1926. Germany took 3,937 tons in 1926 and 7,804 tons in 1925. This big decline

was accounted for to a very great extent by the financial difficulties which the German people have experienced during the whole year. France took 6,504 tons compared with 7,896 tons in 1925, the financial position having again affected the French manufacturers. All the other European countries are not particularised in the trade returns, and the figures for other countries, excluding Russia, Germany, Netherlands, and France brought 18,081 tons compared with 24,800 tons in 1925. Among these latter countries Italy was not so good, but there was a decided improvement in the case of Czecho-Slovakia. The countries in South America were bad, and they took 9,333 tons against 16,430 tons during the previous year. These countries also experienced a financial crisis, and in the case of the Brazilian market only about one-half the usual trade was done.

Prospects for 1927.

The year 1927 has opened rather more promisingly, but the improvement must come gradually. The demand, at present, is rather bigger than usual, and the fact that the industry retained a high proportion of the world's trade must not be forgotten. Although 1926 was a bad year England exported only about 15,000 tons less machinery than in 1924. A promising feature about the trade is that there is a great deal more inquiry from the home industry, and the same applies to both Germany and France. Italy is not moving very rapidly, but India is just nibbling. The inquiry is of a more definite nature than has been the case for some time, and there is rather more actual business stirring.

Textile Machinery Exports from Great Britain (in Tons).

To		1914.	1919.	1921.	1922.	1923.	1924.	1925.	1926.
Russia		9,953	275	3	69	184	875	1,875	15,225
Germany		5,891	23	341	1,948	840	3,332	7,778	3,937
Netherlands		5,186	1,285	2,470	2,178	3,846	3,854	11,514	8,819
France		7,263	13,895	24,383	12,127	9,977	6,694	7,896	6,504
Other Countries in Europe		15,127	6,263	12,720	13,994	19,787	20,877	24,808	18,081
China (including Hong Kong)		6,118	2,282	16,489	19,797	7,118	2,486	1,644	1,933
Japan		13,473	11,547	22,531	22,765	17,484	8,974	3,898	6,960
United States of America		4,475	1,935	6,397	7,042	6,845	5,505	4,172	2,141
Countries in South America		3,548	3,093	5,404	8,019	7,051	11,529	15,954	9,333
British East Indies		42,599	21,499	60,276	62,231	57,094	33,263	34,966	23,095
Australia		1,011	1,904	1,691	2,849	4,466	2,283	2,500	2,491
Other Countries		1,739	1,919	4,290	2,137	5,111	3,900	6,102	3,054
Total	Spinning Machinery	77,053	47,906	118,743	127,818	109,890	78,403	92,186	75,398
	Weaving Machinery	27,970	15,503	29,569	22,133	22,998	20,089	25,601	21,575
	Other Machinery	11,360	2,511	8,683	5,205	5,915	5,149	5,329	4,570
	TOTAL	116,383	65,920	156,995	155,156	138,803	103,641	123,107	101,543

Abstracted from the *Textile Mercury*.

Imports into India of Machinery and Mill Requirements.

THERE being no separate Figures for the Imports of Machinery for Bombay City, the following figures of imports for all India will give the reader an idea of the total imports. The value of plant and machinery in each of the Bombay cotton mills is however recorded on pages 363 to 367.

Articles.	For year ending 31st December		For year ending 31st March		
	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Textile Machinery (Cotton)	2,46,56,390	6,42,07,801	..	..	..
Cotton Spinning ..	..	..	4,57,77,214	6,51,54,107	3,97,20,365
Cotton Weaving ..	..	..	2,26,25,899	1,39,55,123	1,10,69,807
Cotton Bleaching and Dyeing	..	..	17,95,411	13,95,227	8,29,799
Cotton Printing ..	..	..	16,066	25,956	5,627
Cotton—Other Sorts..	..	..	62,03,568	43,70,268	43,89,270
Shuttles	11,08,300	17,42,001	17,02,292	9,52,141	9,15,769
Other Sorts of Textile Machinery	..	..	68,63,942	2,41,638	2,69,462
Pickers	10,21,830	12,38,932	12,20,616	6,30,900	7,81,104
Picking Bands & Straps..	16,62,960	10,23,801	8,30,441	6,33,478	7,83,900
Roller Skins	10,40,010	18,70,449	16,84,084	9,70,870	11,91,438
Belting for Machinery :—					
Of Cotton	30,60,670	26,27,907	20,32,656	13,97,372	15,20,037
Of Leather	56,66,930	56,62,410	53,02,170	41,42,996	43,64,622
Of Other Materials ..	39,40,250	29,65,826	27,53,272	27,79,238	29,27,827
Bobbins	45,41,790	1,22,22,518	1,19,88,355	57,64,448	50,53,962
Bleaching Materials ..	24,87,280	27,57,281	15,53,981	6,61,066	7,07,233
China Clay	26,87,780	21,52,688	21,55,176	15,88,182	15,89,985
Dyeing and Tanning Materials :—					
Alizarine	58,21,740	77,39,356	74,58,204	43,24,529	47,52,286
Aniline	2,17,64,290	2,38,20,309	2,17,47,534	2,02,27,184	2,02,55,713
Barks for Tanning ..	42,020	1,89,756	1,89,390	1,48,913	91,845
Cochineal	8,62,630	54,797	1,03,410	2,16,473	3,89,365
Cutch and Gambier ..	12,11,950	10,06,739	11,12,452	9,33,261	10,96,869
Indigo, Synthetic ..	3,26,490	6,94,775	4,78,489	4,82,261	3,82,468
Saffron	14,85,620	3,85,284	7,66,289	12,23,060	12,78,594
Other Sorts	5,44,090	3,68,006	20,100	1,33,571	95,617

Articles.	For year ending 31st December		For year ending 31st March		
	1920.	1921.	1922.	1923.	1924.
	Rs.	Rs.	Rs.	Rs.	Rs.
Machinery & Mill Work .					
Prime Movers other than Electrical ..	1,85,94,930	2,90,85,997	..	..	..
Locomotives :—					
Oil Engine & Parts	..	..	2,83,285	1,96,818	2,09,829
Steam	..	..	36,95,856	21,91,149	16,88,927
Others	..	..	2,13,759	57,303	1,63,494
Other than Locomotives :—					
Gas Engines & Parts	..	..	..	..	11,16,892
Oil Do. Do.	..	..	88,62,257	64,53,525	96,84,070
Steam Do. Do.	..	..	1,45,22,844	96,34,388	69,97,374
Others	..	..	14,83,198	4,58,055	3,09,447
Electrical Machinery	1,52,95,290	3,64,21,590	..	..	..
Control & Switchgear	..	..	15,39,709	17,77,349	36,17,527
Generators, Alternators & Dynamos	..	..	79,81,501	39,79,921	39,19,798
Motors	..	..	1,49,66,993	81,59,502	72,26,124
Transformers ..	..	..	16,03,973	20,98,969	15,38,597
Turbo Generating Sets	..	..	12,40,307	14,22,901	11,11,475
Other Sorts ..	..	..	1,16,60,208	85,52,878	48,44,485
Machine Tools	74,46,940	1,35,63,686	1,24,48,623	58,08,174	51,94,292
Metal Working Machinery ..	16,07,890	36,28,572			
Mining do. ..	18,02,410	69,48,425	72,90,817	40,32,114	1,07,79,515
Leather Tanning and Curing Machinery ..	..	..	5,84,660	3,62,137	61,283
Oil Crushing and and Refining Machinery ..	..	..	44,26,970	10,85,539	38,43,351
Oils :—					
Mineral Fuel	1,04,22,240	1,22,07,615	1,33,34,034	1,44,91,593	1,75,54,430
Lubricating Oil ..	2,09,06,120	2,79,24,167	..	..	..
Batching Oils ..	..	..	72,30,300	47,72,560	39,89,816
Other Sorts ..	..	..	1,61,42,996	1,31,90,048	1,34,41,841
Saw Mill and Wood Working Machinery ..	9,68,010	33,13,640	29,16,402	9,75,976	10,34,838
Sewing and Knitting Machines and Parts thereof	82,74,400	23,04,965	28,71,329	51,45,533	54,10,978
Jute Machinery ..	2,17,93,750	4,47,46,556	4,32,14,898	1,79,[illegible],249	1,36,89,404
Paper Mill Machinery ..	..	..	33,87,683	13,95,613	6,16,253
Coal	11,82,210	4,21,23,835	5,78,08,678	3,08,92,733	4,65,85,004
Coke	1,10,800	5,01,311	7,00,562	13,54,075	10,34,903
Agricultural Implements.	36,96,170	29,81,539	26,37,766	22,68,996	20,64,076
Agricultural Machinery. .	18,54,720	21,17,500	10,58,032	5,23,489	5,67,935
Boilers	1,14,50,510	2,51,01,046	2,55,41,895	1,24,19,436	98,63,626

Foreign Textile Machinery Manufacturers and Suppliers.

THE machinery for the cotton mills in Bombay continued to be imported from England until about the year 1900, after which the introduction of bleaching and dyeing gave a chance to the Continental machinery manufactuters who had made a speciality of calendering and finishing machines. Among the earliest to secure business from the local factories were the firms of Messrs. Geabour & Co., C. G. Haubold & Co., and Zittauer Maschinenfabrick. As regards the power plants the Swiss and German makers had not been able to compete with the British-made compound condensing engines and Lancashire boilers but since the introduction of the Diesel oil engine in India, about the year 1905, several of them have been installed in the Bombay cotton mills, one of the largest suppliers being the Swiss Locomotive and Machine Works, Winterthur.

However, after the cessation of the world war, the German makers of textile machinery opened out Agencies in Bombay and are now catering for the local market. It has to be noted that the Germans have not only devoted their energies to the manufacture of textile machinery, but have utilised in recent years various forms of organisations by which the best machinery is made and marketed at the lowest cost. For this purpose they eliminate competition among themselves and standardise their products. The Cartel and the Trust have been prominent of late in German industry : the former is a combination of various allied concerns which agree not to compete among themselves but fix their own prices and allocate sales, and the latter controls all allied industries from a central office. In the textile machinery industry the need was felt for a similar organisation which would eliminate competition, standardise production and enable the best material to be sold at the lowest and cheapest prices. So, immediately after the war, the foundations were laid of "Unionmatex," which is a combine of textile machinery makers. The firms of Messrs. W. Schlafhorst & Co., Zittauer Maschinenfabrik A.-G., C. H. Weisbach, A. Monforts and Ernst Gessner A.-G., allied themselves together and their success induced in 1922 others, *viz.*, Messrs. Gebr. Sucker, Grossenhainer Webstuhl-und-Maschinenfabrik A.-G., Oberlausitzer Webstuhlfabrik, C. A. Roscher, Franz Zimmers Erben and Th. Blass A.-G., to join the "Unionmatex." The conversion of a large ammunition work in Bavaria in 1922 into a plant for making spinning machinery made up the eleventh member—Messrs. Deutsche Spinnereimaschinenbau A.-G.

But "Unionmatex" is not a Cartel that fixes prices, nor is it a Trust that centralises control. It is, however, an effective combine being composed of specialists, each one of whom produces his own set of machinery but all according to a common standard. There is no rivalry or merger but only an alliance for purposes of consultation, co-ordination and sales. The combine includes firms who produce every sort of textile machinery and while each of them specialises in his own line, he produces his machines to the same standard as the others. Co-ordination is continuously maintained by free and mutual consultations among the various staffs, experts and directors of all the eleven concerns, and complete but standardised ranges of all textile machinery can thus be obtained as if all were made under one roof only. In marketing their products in foreign countries the members also act in unison, and have a central sales agency in Berlin.

This new organisation has extended its scope of business to India, the Agents of "Unionmatex" being Messrs. Volkart Brothers of Bombay.

Foreign and Continental Machinery Manufacturers and Suppliers

Adolph Seelemann & Sohn, A.G. Germany.
Ateliers Roannais De Construction Textiles, Roanne.
Baer, Henry, & Co., Zurich.
Ball Bearing S.-R. O., Orliken.
Battaglia, G.
Belting & Leather Products Association Inc. New York.
Brown, Boveri & Co., Ltd., Baden (Switzerland).
Bruno Knobloch, Apolda, Germany.
Carl Zangs A. G., Rhineland.
Carl Hamel, A. G., Sachsen.
Danneburg U. Quandt, Berlin.
Deutsche Spinnereimaschinenbau A. G., Ingolstadt, Bavaria.
Edouard Dubied & Co., Neuchatel.
E. Th. Wagner, Saxony (Germany).
Etablissements Tourtellier, France.
Elitwerke Abteilung Diamantwerke A. G Saxony, Germany.
Ernst Gessner A. G., Aue i Erzg.
Fabbriche Riunite Formanti.
Filatura Mako, North Italy.
Formenti, Ltd., Carate, Italy.
Friedr. Haas, Lennep, Germany.
Franz Zimmers Erben, Warsdorf.
Ganz & Co.
Gebrueder Sucker, Gruenberg(Silesia).
Graton & Knight Mfg. Co., Worcester, Mass., U.S.A.
Grosser, G. F., Liepzig, Germany.
Grossenhainer Webstuhl-u-Maschinenfabrik, Grossenhain (Saxony).
Haubold, C. G. A.-G., Chemnitz.
Heemaf Mfg. Co., Holland.
Heusch, Severin, Aachen, Germany.
Hilscher, G., Chemnitz (Saxony).
Hutter & Schrantz.
India Agencies, Ltd., Hamburg.
Joseph Dixon Crucible Co., Jersey.
Josephy's Erben, Bielsto, Poland.
Kruger I.
Lebocey Freres, Troyes, France.
Ludwig Lehmann A. G., Berlin.
Mejer, Chr. Tuebingen, Germany.
Maschinenfabrik Augsburg (Volkart Bros.), Nurnberg.
Montorts, A., M. Gladbach, Germany.
Neu Etablissements, Lille, France.
Oerlikon, Ateliers de Construction, Zurich, Switzerland.
Radealli, G., Milan.
Rhode Island Humidifier & Ventilating Co.
Rieter, J. J., & Co., Ltd., Winterthur.
Roscher, C. A., Oberlausitzer Webstuhlfabrik, Neugersdorf (Saxony).
Ruti, Alteliers De Construction, Zurich, Switzerland.
Sandoz Chemical Works, Base, Switzerland.
Scholten's W. A. Chemical Works, Ltd., Graningen, Holland.
Schweiter Ltd., Horgen, Switzerland.
Schaerer-Nussbaumer & Co., Erlenbach, Switzerland.
Schieren, Chas. A., & Co. (New York).
Schlafhorst, W., & Co., M. Gladbach.
Schnitzler & Vogel, G.m.b.h., Crefeld, Rhineland, Germany.
Society of Chemical Industry in Basle, Basle.
Sulzer, Bruderer & Co. (London).
Swedish General Electric Co., Ltd.
Swiss Viscose Society, Emmenbruck, Switzerland.
Swiss Locomotive & Machine Works Winterthur.
Tayrac, J. De, Lille (France).
Texas Company.
Th. Blass A. G., Seifhennersdorf.
Unionmatex (Volkart Bros.)
Vacuum Oil Co., U.S.A.
Veltner Textilwerk A. G., Berlin.
Waggon-und Maschinenbau Aktiengesellchaft Gorlitz, Germany.
Weisbach, C. H., Chemnitz, Saxony.
Zittauer Maschinenfabrik A. G.

Abstracted from the *Indian Textile Journal*, Bombay.

Proposed Textile Machinery Works in Bombay.

It will be interesting to record the attempts made to manufacture cotton spinning and weaving machinery in Bombay about the year 1895-96. Among the several schemes projected in India in connection with the textile industry, was a project for the establishment in Bombay of Cotton Machinery Works to be fitted with a manufacturing plant imported from England. In July 1897 the proposal had advanced to the stage of collecting capital for the purpose and the prospects were discussed by the Bombay Correspondent of the *Manchester Guardian* as under :—

"The question of establishing a cotton machine works in India has been under private consideration for a long time, and it would appear that the promoters see more conditions of success than might be supposed. India has to import all its lathes and machine tools, its pig and other iron, and its experienced workmen from England, and therefore the probabilities of success in the direction proposed do not seem very bright. The head of the proposed company will be a man well known in connection with the establishment and working of profitable cotton spinning and weaving concerns of the largest type in the Bombay Presidency. It is rumoured that the capital is likely to be from 15 to 20 lakhs of rupees (£93,500 to £125,000), but a capital of this amount, though large, is far too small for the carrying out of the objects proposed. At the outset, the aspirations of the company are to be confined within certain limits; flyers, rings, travellers, all kinds of spindles, and some few other details of machinery are to be imported from England, but the machines are to be constructed and finished in Bombay. The system to be adopted is the construction of machines from the principles advocated by the various English makers, the best parts of each to be chosen as experience has determined in the working of Indian cotton, and as English patents are not generally protected in India, there is not much chance of the new company getting into trouble by infringement. It will be news for many persons that several of the small engineering enterprises in Bombay have during the past two years been making efforts towards manufacturing reeling machines, tin cylinders for mules and winding frames, all the parts of ginning machines except the knives, and many sections of other existing machines. The matter at present is being kept strictly secret, but it is understood that some of the machine tools have already been purchased in Lancashire, and that one of the principal promoters of the company will soon be in Lancashire from India in order to complete arrangements."

In commenting on the subject at the time (1897) the *Indian Textile Journal* said :—

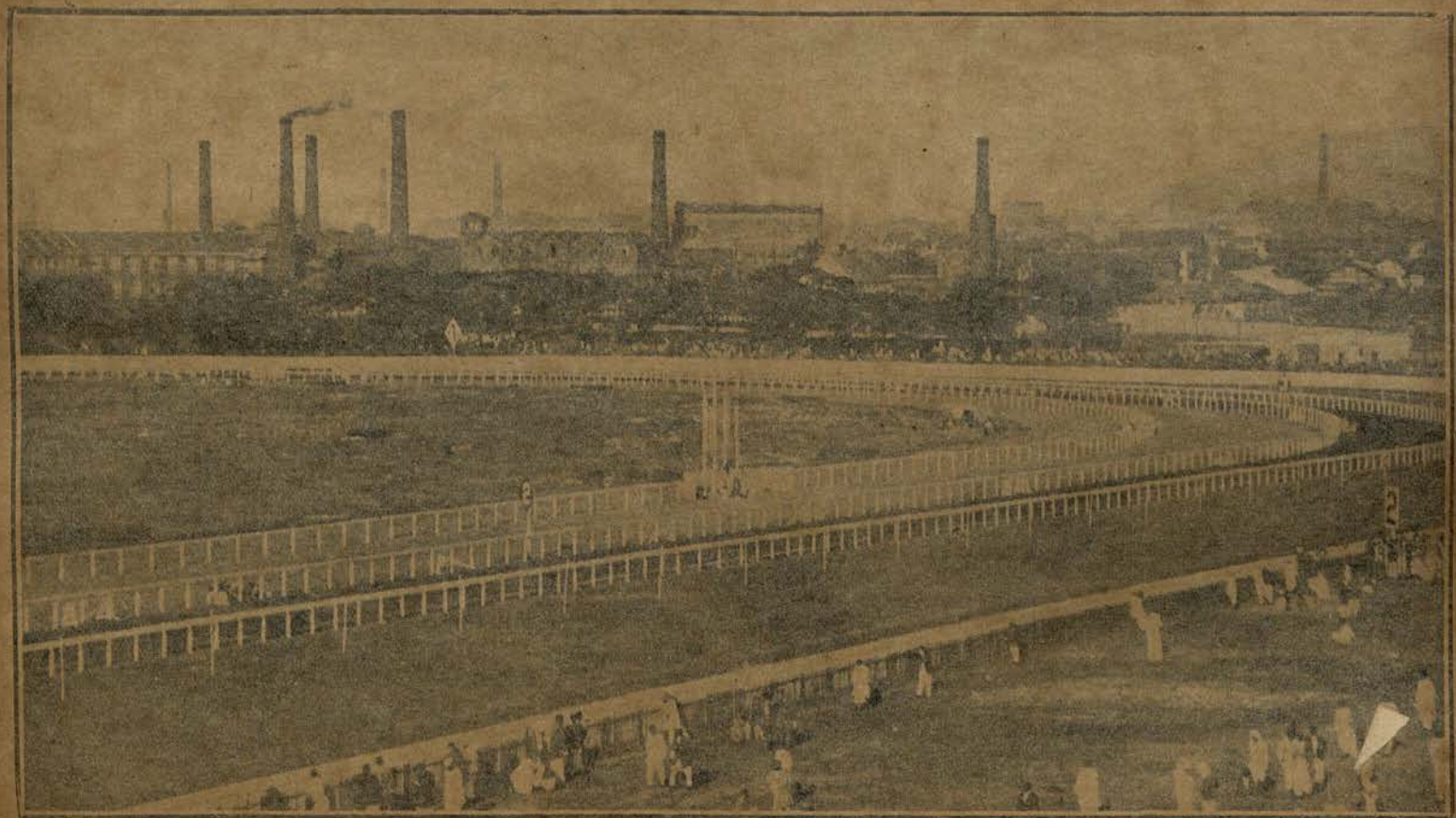
"It is about eight years since we first heard of a similar scheme, which, at that time, was based upon the purchase of the Junction Ironworks near Manchester, and the transport of all the tools to Bombay. It is true that Bombay spends enormous sums on English machinery : it is also true that the manufacture of the machinery would form a valuable addition to our local industries, but the same difficulties stand in the way of realising this idea now as condemned it eight years ago. All textile inventions of any consequence are protected in India; not only those of England but even those of America, Germany, and

France, are to be found in the Indian Patent Office records. Let us suppose that a textile machine factory, fully equipped with the best machinery, was established in Bombay. The foremen, and perhaps a few leading hands would come out with the plant. The first business would be the search for workmen—several hundreds of them—all men accustomed to a high degree of accuracy in their work. Where are they to be found? If the factory is started at all, it would have to take such fitters, turners and machine men as are to be found about Bombay, and their training would be the first heavy expense of the company. Their work would go, not into store but into the scrap heap, for, being in direct competition with duty-free English textile machinery, a bad beginning with the local mills would ruin the prospects of the new company. Odd jobs of repair would not pay, as they would demand too great a variety of machines, and of patterns. A certain amount of repair work is done by outside workshops for mills, and gins have been made in India of a rough description, but the two capital difficulties of competition with home makers unchecked by duties, and the scarcity of good workmen, are sufficient to effectually check any ambitious attempt to make textile machinery in India. Cotton spinning is much more profitable as an investment, and much more easy than machine making. India's chief revenue for many years to come will be from raw produce, the resources in which are not yet half developed. Manufacture involving highly skilled labour can only grow with the proper development of technical knowledge among the artisans. It is scarcely ten years ago (1889) since an attempt was made in Bombay to manufacture card fillets with English machines and materials. The project was a very attractive one. You could have your fillets to any pattern almost while you waited, made with the very best of materials by cheap Indian labour. It soon appeared that "any pattern" meant any pattern not patented, and held by rival English makers. The cheap Indian labourer maltreated the delicate machines most cruelly, and the damp atmosphere of Bombay rusted and ruined the stock of wire. There are much better investments in India both for local and home investors than the proposed Textile Machine Works in Bombay."

The above observations appeared in September 1897 and no cotton machine works have since been undertaken in any part of India, the spinning, weaving and finishing machinery having been imported mainly from Great Britain.

Manufacture of Lancashire Boilers in Bombay.

It is however to be noted that the difficulty of shipping and importing the large Lancashire boilers and the heavy cost of freight, induced Messrs. Richardson & Cruddas to manufacture them at their Works in Bombay about the year 1892. Several of these boilers were turned out for the local and up-country cotton mills with a saving of from 10% to 15% in the cost compared with the imported boilers. Their manufacture was however discontinued on the advent of the electric drive for the local factories and on the development of Messrs. Richardson & Cruddas' Works for coping with the greater demand for bridges and other important structural work. The firm has however retained the plant and staff for the manufacture of Lancashire boiler flues and all kinds of heavy casting and gearing for the cotton mills.



BOMBAY COTTON MILLS : VIEW FROM THE RACE-COURSE. [Photo : Spedia.

Machinery Business with Bombay.

In the old days, machinery business with Bombay was done almost entirely by the intermission of commercial houses in London and Liverpool, which, as a rule, knew nothing technically of the requirements and much otherwise avoidable delay was caused by matters of detail having to be referred back to the machine makers. Not only so, but building plans and instructions had to come from the same source, and as in scarcely one case had the persons so consulted any knowledge of the country beyond what was to be found in books, they naturally fell into certain errors in construction, which were subsequently found to be irremediable except at the cost of remodelling the whole building. Similar mistakes were at the outset made in the engines which were built without consideration being had to the extra capacity required for the high temperature of condensing water to be dealt with in Bombay in the hot season. The cotton machinery was also not quite suited to the physique and capacity of the Indian mill operative and special alterations had to be made in the castings, the height of the ring frames and in other particulars.

The Bombay Spinning Mill and the Oriental Mill, which were projected between 1854 and 1858, negotiated more or less directly with Messrs. Platt Brothers and John Hetherington & Sons for the machinery, while the Dharamsey Poonjabhoy Mill, which originally started in 1860 as the Coorla Mill, was fitted with machinery ordered through London firms. Mr. Dharamsey Poonjabhoy, however, took over its management in 1865 and decided to extend the mill from 30,000 spindles and 300 looms to 90,000 spindles and 1,000 looms, and sent his son Mr. Cassumbhoy Dharamsey to Manchester in 1872 to select the plant. The latter placed orders with about half a dozen different makers for the textile machinery and with three to four makers for the engines, boilers, gearing and other appliances. This heavy mixture of plant and machinery did not give satisfactory results at the New Dharamsey Poonjabhoy Mill and the same had been the case with mills whose owners or agents, through ignorance or persuasion, resorted to machines of various makers especially in the same department.

Manufacturers' Representatives in Bombay.

As the demand for machinery increased for the Bombay mill industry the makers sent out their own representatives and these included even the partners and directors of the most eminent firms of British manufacturers. There has thus been a friendly invasion to Bombay every cold weather, since 1875 or even earlier, of canvassers and experts in cotton spinning, weaving, finishing and dyeing, in engineering and in general mill furnishing.

It must be premised that the man who is commissioned to go beyond the limits of Great Britain in the interests of his firm is not quite on the same level as the ordinary commercial traveller. He is in fact specially selected on account of the knowledge he has acquired of the particular machinery he has to offer, and in a foreign country, he should possess tact and at least an elementary acquaintance with the ways and habits of the people with whom he hopes to do business.

To begin with, the hours of business are greatly affected by the social habits of the people, and these again by questions of climate. The average Indian capitalist, who acts as the managing mill agent, probably puts in more hours a day than any one in the same position in any part of the world, although he is visible at his office only in the afternoon. In many cases he would be talking business

THE LATE MR. HENRY PLATT.
Messrs. Platt Bros. & Co., Ltd.

THE LATE MR. SAMUEL BROOKS.
Messrs. Brooks & Doxey Ltd.

THE LATE MR. ED. LORD.
Messrs. Lord Brothers.

THE LATE MR. WM. DICKINSON.
Messrs. Wm. Dickinson & Sons, Ltd.

MACHINERY MANUFACTURERS.

in his own house from an early hour, before he pays his daily visit to his mill, spending there from one to two hours. He usually attends office from 1 to 5, and after an evening drive he partakes of his meal, and is again engaged in receiving business visitors till it is time to retire. The programme is of course not a universal one, but is typical of the life of a number of our business men in Bombay. It would be far from safe, however, to assert that these gentlemen get through during these long hours as much business in volume as might be done in half the time. Where an important affair has to be carried through, say the placing of a contract for a cotton-mill, the measure of time for the settlement of the order, after full details are in the hands of the purchasers, may be taken as weeks in England as against months in India. Moreover, the English private owner or company does not invite tenders, and ask for plans until the providing of the capital required is beyond doubt. In India, on the contrary, quite one-half the schemes projected are never carried out, an experience which is not particularly encouraging to the representatives of the makers who have been put to the trouble and expense of coming out from Lancashire and preparing estimates and plans.

Difficulties of Securing Orders.

The want of technical knowledge of the machinery and processes on the part of the majority of mill promoters and agents and their general ignorance of their own particular requirements have also caused prolonged and vexatious delays in the settlement of a contract and the machinery maker's representative has often found to his surprise that arrangements had been completed elsewhere while he had been assured of an early execution of the contract with him. The more patient and experienced canvassers got used to the ways of the machinery buyers and to the interference of their brokers or agents and could manage to secure orders for the makers especially in the boom days. There was at the same time a distinct advantage to the mill owner when the representative of an engine builder or machinery maker was himself a practical man and could give expert advice to the purchaser and supply the right kind of plant or machinery with suitable plans and specifications.

On the whole, however, complications did exist during the negotiations of an order and particularly when the visitor from Lancashire was not in a position to gauge the financial situation of a proposed venture and the credentials of those responsible for carrying it out. Despite these and other difficulties the friendly invasion of the manufacturers' representatives has continued in co-operation with the resident Agents who have taken an active part in the development of England's machinery trade with India and particularly the trade in textile machinery.

List of Tourists.

The lists on pages 639 and 640 will give the reader an idea of the number of tourists who have come out to Bombay between 1896 and 1926 and the position and standing of the firms which have been supplying machinery for the Indian market. Several of the representatives whose names appear have come out more than half a dozen times, Mr. Wm. Ingham of Messrs. Wilson Bros. Bobbin Co., Ltd., having visited the various centres of the mill industry in India at least 25 times during the last 40 years.

THE LATE MR. JOHN PLATT.

THE LATE MR. JAMES PLATT.

THE LATE MR. SAMUEL R. PLATT.

MESSRS. PLATT BROS. & CO., LTD.

MR. FRED. BOOTHMAN.
Messrs. Wm. Dickinson & Sons, Ltd.

MACHINERY MANUFACTURERS.

DR. OSCAR DENZLER.
Messrs. The Swiss Locomotive & Machine Works.

MR. CARL HAUBOLD.
Messrs. C. G. Haubold A. G. Chemnitz.

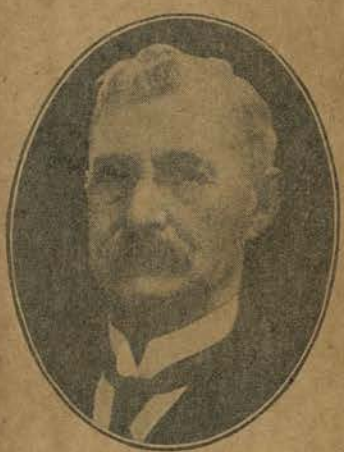
THE LATE MR. JOHN ORMEROD.
Messrs. John Ormerod & Sons, Ltd.

MR. D. H. YATES, M.I. MECH. E., M.I. STRUC. E.
Messrs. John Musgrave & Sons, Ltd.

MR. W. H. ORMEROD.
Messrs. John Ormerod & Sons, Ltd.

MANUFACTURERS AND THEIR REPRESENTATIVES.

MR. THOMAS S. WILSON, CHAIRMAN.



MR. WM. T. INGHAM, DIRECTOR.

MR. F. J. GRIMMER, DIRECTOR.

Messrs. Wilson Bros. Bobbin Co., Ltd., Liverpool.

Messrs. Wilson Bros. Bobbin Co., Ltd., Liverpool, have an old established business in India, their Agents for the last forty years being Messrs. Nowrosjee Wadia & Sons, Bombay. They have at the same time sent out their representatives to this country at different periods, the Chairman, Mr. Thomas S. Wilson, visiting Bombay in 1921 to explore the possibilities of using Indian timber for bobbin manufacture. Mr. F. J. Grimmer was also in India in 1926, while Mr. Wm. T. Ingham, who began his first tour in this country in 1884, has been visiting the mill centres in India almost every year, having made over 25 trips during the last 40 years.

Machinery Makers' Representatives who have visited Bombay.

Mr. James Platt, Mr. Henry Platt, Mr. H. Wilkinson, Mr. F. W. Chadderton and Mr. A. Brothers of Messrs. Platt Bros. & Co., Ltd., Oldham.

Mr. J. W. Nasmith, Mr. J. Seel and Mr. J. Haworth of Messrs. John Hetherington & Sons, Ltd., Manchester.

Mr. R. A. Doxey, Sir Amos Nelson, Mr. G. T. Barrett and Mr. R. Bridge of Messrs. Brooks & Doxey, Ltd., Manchester.

Sir B. Dobson of Messrs. Dobson & Barlow, Ltd., Bolton.

Mr. W. Livesey, Mr. Harry Livesey, Mr. R. Livesey and Mr. Frank Livesey of Messrs. Henry Livesey, Ltd., Blackburn.

Mr. Harwood of Messrs. Hick Hargreaves & Co., Ltd., Bolton.

Mr. W. Parkinson of Messrs. Meredith Jones & Son, Wrexham.

Mr. John Shaw of Messrs. John Shaw & Sons, Salford.

Mr. J. Walton of Messrs. James Walton & Sons, Ltd.

Mr. Alfred Griffiths of Messrs. Guest & Co., Manchester.

Mr. G. Crighton of Messrs. Crighton & Sons, Manchester.

Mr. J. Greenhalgh of Messrs. Wilson & Ingham, Mirfield.

Mr. Ralph Dowson of Messrs. Dowson Taylor & Co., Ltd., Manchester.

Mr. J. Butterworth of Messrs. Butterworth & Dickinson, Ltd., Burnley.

Mr. A. M. Whiteley, Mr. S. Whiteley and Mr. W. Bear of Messrs. John Whiteley & Sons, Ltd., Halifax.

Mr. S. H. Shorrock of Messrs. J. & R. Shorrock, Darwin.

Mr. Sidney Coe of Messrs. Howard & Bullough, Ltd., Accrington.

Mr. T. Inglis of Messrs. Asa Lees & Co., Ltd., Oldham.

Mr. T. Wilson, Mr. F. G. Grimmer and Mr. W. Ingham of Messrs. Wilson Brothers Bobbin Co., Ltd., Garsten.

Mr. Walter Musgrave, Mr. Frank Musgrave, Mr. Walter Wolstenholme, Mr. J. Hardman, Mr. H. H. Stott, Mr. F. Berry, Mr. P. H. Ormston, Mr. P. Wild and Mr. D. H. Yates of Messrs. John Musgrave & Sons, Ltd., Bolton.

Mr. J. Howard Hall of Messrs. Robert Hall & Sons, Ltd., Bury.

Mr. George G. Dickinson and Mr. Fred Boothman of Messrs. Wm. Dickinson & Sons, Blackburn.

Mr. H. B. Grundy of Messrs. O. R. Jackson & Co., Ltd.

Mr. J. H. Riley of Messrs. J. H. Riley & Co., Ltd., Bury.

Mr. H. M. Geldart of Messrs. Sizing Materials Co., Manchester.

Mr. E. Tullis of Messrs. John Tullis & Sons, Ltd., Manchester.

Mr. Peter Eadie of Messrs. Eadie Brothers, Manchester.

Mr. Wilkinson of Messrs. Kay & Wilkinson, Ltd., Bury.

Mr. J. Thompson of Messrs. Galloways, Ltd., Manchester.

Mr. Carl Haubold of Messrs. C. G. Haubold, A. G. Chemnitz.

Alderman E. Keighley of Messrs. George Keighley, Ltd., Burnley.

Mr. W. H. Ormerod of Messrs. John Ormerod & Sons, Ltd., Manchester.

Mr. Henry Pilling of Messrs. Yates & Thom, Ltd., Blackburn.

Mr. G. C. Beeley of Messrs. Thomas Beeley & Sons.

Mr. R. Johnson and Mr. J. Stafford of Messrs. Joseph Sykes Bros., Huddersfield.

Mr. J. Green of Messrs. Lang Bridge, Ltd., Accrington.
Mr. H. Mullineaux of Messrs. Kirk & Co., Blackburn.
Mr. F. Walmsley of Messrs. James Walmsley & Sons, Accrington.
Mr. J. Spenle of Messrs. James Farmer & Sons, Ltd., Salford.
Mr. Harry Kockill of Messrs. H. F. Kockill & Sons, Cleckheaton.
Mr. Andrew of J. Hopkinson & Co., Ltd., Huddersfield.
Sir William Mather and Mr. Ernest Mather of Messrs. Mather & Platt, Ltd., Manchester.
Mr. Oscar Scheweitzer of Messrs. R. Wolf, London.
Mr. Coubrough of Messrs. Mather & Platt, Ltd., Manchester.
Mr. Louis Porritt, Director of Messrs. Wm. Tatham, Ltd., Rochdale.
Mr. Samuel Sefton of Messrs. Dronsfield Bros., Ltd., Oldham.
Mr. W. Scott Taggart of Messrs. Dobson & Barlow, Bolton.
Mr. R. Forshaw of Sir James Farmer & Sons, Ltd., Manchester.
Mr. J. W. Chadwick of Messrs. J. H. Riley & Co., Ltd., Bury.
Mr. R. J. Schilling of Messrs. International Winding Co., Manchester.
Mr. Thomas Whitewell of Messrs. James Eastwood & Sons, Manchester.
Mr. A. Peltzer of Messrs. Howard & Bullough, Accrington.
Mr. Norman Selkirk of Messrs. John Ormerod & Sons, Ltd., Castleton.
Mr. Heap of Messrs. Samuel, Baldwin & Heap, Ltd., Burnley.
Mr. J. E. Tytler of Messrs. Asa Lees & Co., Ltd., Oldham.
Mr. Eugene Hoffmann of Messrs. John Hetherington & Sons, Ltd., Manchester.
Mr. F. Whitham of Messrs. Barber & Coleman, Ltd., Brooklands.
Mr. William Allen of Messrs. C. J. Haubold A. G. Chemnitz.

Buying Agents for Bombay Mills.

The following Firms act as buying agents for machinery, stores and accessories for the Bombay Mills:—

Allen Bros. & Co., Ltd., 14, Bishopgate, London.
Dadabhoy & Co., Coleman St., London, E.C.2.
David Sassoon & Co., Ltd., 9-13, King William St., London, E.C.
E. D. Sassoon & Co., Ltd., 73, Whitworth St., Manchester.
Forbes, Forbes, Campbell & Co., 9-13, King William St., London.
H. M. Mehta & Co., Bolton.
James Finlay & Co., Ltd., Spellow Place, Liverpool.
James Greaves & Co., 11 & 13, Ridgefield, Manchester.
Jeremiah Lyon & Co., Ltd., 4, Gracechurch St., London, E.C.3.
John Elliot & Sons, Cannon St., London, E.C.
Kay & Wilkinson, Ltd., Bury.
L. B. Ashworth, 28, Barton Arcade, Manchester.
Nixon Forrest & Co., 29, Great St., Helens, London, E.C.
Peter Harrower & Co., 41, Corporation St., Manchester.
Shapurjee & Ratanshaw, 83, Cannon St., London, E.C.
Tata Ltd., New Broad St., London, E.C.2.
Times Dharwar & Co., 4, Lloyd's Avenue, London, E.C.3.
Turner & Co., 45, St. Mary Axe, London, E.C.3.
W. H. Brady & Co., Ltd., 16, John Dalton St., Manchester.

Bombay Machinery Agents and Importers.

WHILE the Lancashire machinery makers could secure fairly good business by direct correspondence with the Bombay millowners or by sending out their representatives to India during the cold weather, they could realise the advantages of having a local firm of influence and standing to represent their interests among Indian buyers of machinery and millwork. The makers also found that the better class of machinery agents in Bombay were not mere commission agents between the buyer and the seller but possessed technical knowledge, influence and financial resources for satisfactory business and in several instances they not only secured orders against indents but purchased machinery and accessories in Manchester for cash and sold them to the buyers in Bombay on their account.

This agency system for securing orders for cotton mill machinery and power plants, has continued ever since the mill industry showed signs of expansion in 1880 and there are British manufacturers who have still kept up the old connections they formed with Bombay machinery agents 30 or 40 years ago. And this arrangement has on the whole proved of mutual advantage to the makers and their Bombay agents as the majority of the latter have invariably possessed the requisite technical knowledge of preparing specifications and plans for a new cotton mill or an extension which has also proved of service to the millowners whose own staff, although possessing practical knowledge of the working of the machinery and engines, was not usually qualified to advise generally as to the details of a specification, quantities, prices and other terms and conditions of a contract.

It has also to be noted that the Bombay Machinery Agents have contributed not only towards the development of the textile and allied industries but have taken an active part in the commercial and public life of Bombay as useful and influential citizens as will be seen from the biographical notes and other references in the present volume.

The earliest to start business as machinery agents in Bombay were Messrs. Greaves Cotton & Co. This was in 1870 and it is interesting to note that the agency for Messrs. Platt Brothers was originally held by them before it was transferred to Messrs. Nowrosjee Wadia & Sons in 1880. These two firms continued to secure a substantial portion of the cotton machinery business till the boom period set in and induced other makers in Lancashire to open out agencies and compete in the Bombay market.

Messrs. Sorabji Shapurji & Co., who had been well known as Engineers and Iron Founders, were the third to take up agencies for textile machinery and mill requirements, which they did in 1887.

Mr. J. F. Bradbury and Mr. W. H. Brady, who had gained the confidence of millowners as expert mill managers, also started cotton machinery business in 1895 under the style of Messrs. Bradbury Brady & Co., subsequently converted into Messrs. W. H. Brady & Co., Ltd.

Mr. H. M. Mehta who had been interested in the import of mill accessories and stores, extended his business as Agent for textile machinery and engineering specialities under the style of H. M. Mehta & Co., in 1897 and the firm now controls several important agencies for cotton mills and other industrial concerns.

Messrs. Duncan Stratton & Co., who had been more intimately associated with the agencies for cotton presses and general engineering, began to interest themselves in cotton spinning and finishing machinery from 1906.

Messrs. Gannon Dunkerley & Co. deal in textile machinery, being founded by the late Mr. Herbert Dunkerley in 1895.

There are other firms who do not make a speciality of spinning and weaving machinery but supply the general engineering requirements of cotton mills and these include Messrs. Macbeth Bros. & Co., Ltd., Turner Hoare & Co., Ltd., Symington Cox & Co., Ltd., and Drewet Chowna & Co.

Supplementary to, and in some cases as substitutes for the local machinery Agents, certain makers and exporters have started their own branch offices in Bombay and placed them in charge of technical experts and business canvassers. These include Messrs. Mather & Platt, Ltd., Marshall Sons & Co. (India), Ltd., Felber Jucker & Co., Ltd., and John Musgrave & Sons, Ltd., and the following:—

Babcock & Wilcox, Ltd., Renfrew (1905).
British Thomson Houston Co. (India), Ltd., Rugby.
Callenders Cable Construction Co., Ltd., London.
Card Clothing & Belting, Ltd., London.
Carrier Engineering Co., Ltd., London.
Chas A. Schieren Co.
Fleming, Birkby & Goodall, Ltd., Halifax.
General Electric Co. (India), Ltd., London.
Glenfield & Kennedy, Ltd., Kilmarnock.
Graton & Knight Mfg. Co., Worcester, Mass., U.S.A.
Henley's Telegraph Works Co., Ltd., London.
John Lord, Ltd., Bacup.
John Thompson (Wolverhampton) Ltd., Wolverhampton.
Joshua Lister & Sons, Ltd., Mirfield (1923), Yorks.
J. & W. H. Ormerod, Ltd. (1923), Denton.
Kirk & Co. (Blackburn), Ltd., Blackburn.
Metropolitan Vickers Electrical Co., Ltd., Manchester.
Mirrless Bickerton & Day, Ltd., London.
Parry's Engineering, Ltd., Bombay.
Richard Leeming & Sons, Blackburn.
Roberts Maclean & Co., Ltd.
Stewarts & Lloyds, Ltd., Glasgow.
Sulzer Bruderer & Co., London.
Swiss Locomotive & Machine Works Co., Winterthur.
Sykes & Oliver, Ltd. (1924), Littleborough.
Walrus Fibre Mfg. Co., Ltd., Rochdale.
Zollikofer & Co. (Zurich).

Among the Foreign firms who are dealing in textile machinery are Messrs. Volkart Brothers, The Havero Trading Co., Ltd., Giacomo Jucker and Sulzer, Bruderer & Co.

Firms now Extinct or Closed.

Of the Agency firms which represented British textile machinery makers in former years and which have now ceased to exist by the death or retirement of the partners we may mention Mr. John Marshall who was Agent for Messrs. Dobson & Barlow, Ltd., until his death in 1898, the business then being taken over by Messrs. St. Paul and Dadina until the retirement of the partners. Messrs. Norrie Mitchell & Co. did a good business between 1884 and 1888 as agents for Messrs. Brooks and Doxey, Ltd., and Messrs. John Hetherington & Sons, Ltd. Among other firms, now extinct, we may recall Messrs. Charles Brown & Co., Thomas Hill & Co., Ralph Douse & Sons, S. C. Dhondy & Co., and Surrosh K. R. Cama & Co.

Messrs. Greaves Cotton & Co., Ltd.

The Indian cotton industry of to-day may be said to be the result to a large extent of the life-work and energy of the comparatively small body of Lancashire engineers, mechanics and managers, who in the early fifties brought the art of cotton spinning and weaving eastwards from Europe, much in the same way in which their ancestors the Hugenots, introduced the weaving industry into England back in the dark days of the eighteenth century. These enterprising men brought with them to India not only the technical knowledge necessary to their craft, but also a large measure of that indomitable Lancashire energy, dogged determination, and resolute perseverance which have created, the great mechanical industries of the country Palatine.

Pre-eminent amongst these pioneers we find Mr. James Greaves and his colleague Mr. George Cotton who started the firm of Greaves Cotton & Co. in Bombay in 1868 when scarcely a dozen cotton mills had been projected in the city. The earlier operations of the firm were confined to cotton ginning and pressing factories and in this connection it will be appropriate to record the important innovation in the leather rollers for the Macarthy cotton gin which was introduced by Mr. James Greaves. He did not, however, apply for a patent for the invention but allowed its free use by the public with the result that it was taken up extensively by the trade and soon revolutionised the ginning industry in India on account of the adaptability of the improved roller for separating the fibre of Indian cotton from the seed compared with the Knife roller gin.

As projectors and agents of ginning and pressing factories and cotton mills Messrs. Greaves Cotton & Co. have ranked among the most prominent of European houses in this city while their business in machinery and millwork has been very extensive, including all kinds of plants for cotton spinning and weaving mills, ginning and pressing factories, oil and flour mills and all classes of industrial machinery, electrical apparatus and factory appliances and in regard to the machinery for cotton mills and other factories the firm not only accepted indents on the usual commission basis but purchased large quantities of machinery and even complete plants for cash on their own account from the makers and supplied them direct to the mill agents and factory owners.

After the death of Mr. James Greaves in 1881 the firm consisted of Sir George Cotton, Mr. John Greaves, Mr. Herbert Greaves, Mr. Septemes Greaves and Mr. A. K. Leslie. The business expanded with the growth of the cotton mills and other industries, constituting Messrs. Greaves Cotton & Co. the largest millowners and general machinery suppliers in the country before the abnormal depression in the yarn trade with China in 1926 necessitated changes in the spinning mills under their agency. The machinery business however continued to expand and now covers an extensive range of specialities for all classes of industries and factories, the Railways and Public Works Departments.

Sir George Cotton died in 1905. Mr. A. K. Leslie retired in 1907, Mr. John Greaves died in 1903 and Mr. Herbert Greaves in 1921, and the firm was registered as a private joint stock Company in 1922, the Managing Agents being Messrs. Greaves Cotton & Co., consisting of Mr. J. B. Greaves and Mr. N. Greaves Hunt as partners.

MESSRS. GREAVES, COTTON & CO. : MEMBERS OF THE FIRM AND THE STAFF IN 1896.

Sitting, from left to right :—Mr. Green ; Mr. W. McClumpha ; Mr. Osborn Marshall (Broker) ; Mr. H. Cheetham ; Mr. Hammond ; Mr. S. E. Greaves ; Mr. John Greaves ; Sir George Cotton ; Mr. A. K. Leslie ; Mr. Bejonji N. Kapadia ; Mr. Bomenji H. Bharucha ; Mr. C. N. Chanda ; Mr. S. C. Commisariat and Mr. D. Bhat.

Standing close behind Mr. John Greaves and Sir George Cotton is Rao Bahadur Curramsey Damji while standing to the left of Sir George Cotton is Mr. Lavji Meghji.

THE LATE MR. H. R. GREAVES.

MR. N. GREAVES HUNT.

MR. J. B. GREAVES.

PARTNERS IN THE FIRM OF MESSRS. GREAVES COTTON & Co.

Messrs. Greaves Cotton & Co. have been in existence for over half a century during which their machinery business has not only expanded with the growth of the textile industry but the firm now occupies the leading position as importers of general industrial machinery and engineering plants of every description. In addition to this they have taken up the agency of Messrs. N. V. Nederlandshe, Kunstzijde Fabriek, Enka, for artificial silk for which the demand in India has grown considerable in recent years.

The list of machinery and other manufacturers whom Messrs. Greaves Cotton & Co., Ltd., represent in connection with the cotton mills are as under :—

Howard & Bullough, Ltd.,	Accrington ..	.. Cotton Spinning Machinery.
William Tatham, Ltd.,	Rochdale ..	.. Waste Spinning Machinery.
Dronsfield Bros., Ltd.,	Oldham ..	.. Card Grinding & Roller Covering Machinery.
Taylor Lang & Co., Ltd.,	Stalybridge ..	.. Cotton Waste Mules.
Henry Livesey Ltd.,	Blackburn ..	.. Cotton, Cotton Waste Looms.
Livesey & Crowther, Ltd.,	Manchester ..	.. Winding Machinery.
Hutchinson, Hollingworth & Co., Ltd.,	Dobcross ..	.. Woollen Looms.
Mather & Platt Ltd.,	Manchester ..	.. Bleaching, Dyeing, Finishing.
Thomas Broadbent & Sons, Ltd.,	Huddersfield	.. Hydro-Extractors.
Yates & Thom, Ltd.,	Blackburn ..	.. Steam Power Plants.
Frank Pearn & Co., Ltd.,	Manchester ..	.. Boiler Feed and Power Pumps.
E. Green & Son, Ltd.,	Wakefield ..	.. Fuel Economisers.
Daniel Adamson & Co., Ltd.,	Dukinfield ..	.. Steam Turbines.
John T. Hardaker, Ltd.,	Bradford ..	.. Labour-saving Appliances.
London Bros., Ltd.,	Glasgow ..	.. Machine Tools.
Ruston & Hornsby, Ltd.,	Lincoln ..	.. Oil Engines, Pumps, etc.
F. & A. Parkinson, Ltd.,	Leeds ..	.. A. C. Motors.
Electrical Apparatus Co., Ltd.,	London ..	.. Control Gear.
British Insulated Cables Ltd.,	Prescot & Helsby	.. Cables.
Veritys Ltd.,	Birmingham	.. Fans, Dynamos & Motors.
Nalder Bros. & Thompson, Ltd.,	London ..	.. Electrical Instruments.
Morgan Crucible Co., Ltd.,	London ..	.. Carbon Brushes.
Wm. Kenyon & Sons,	Dukinfield ..	.. Cotton Ropes & Bandings.
J. H. Fenne & Co., Ltd.,	Hull ..	.. Leather & Textile Beltings.
Joseph Sykes Bros.,	Huddersfield	.. Card Clothing.
Stott, Walker & Carruthers,	Manchester ..	.. Card Cans & Sundries.
Thomas Dawson (Blackburn), Ltd.,	Blackburn ..	.. Shuttles.
Robert Hyde & Co.,	Stalybridge ..	.. Machinery Cloths.
William Drake, Ltd.,	Blackburn ..	.. Healds & Reeds.

Messrs. Nowrosjee Wadia & Sons.

This is one of the oldest firms of machinery agents in Bombay, having been founded in 1878 by Mr. Nowrosjee Nusserwanji Wadia when about 30 cotton mills were projected in the city. At the same time Mr. Wadia acted as technical adviser to the millowners of those days, being appointed manager and engineer of the Maneckji Petit Mills with whose success and prosperity his name has been as intimately associated as with the development of the machinery and engineering business in the Presidency. The activities of the firm increased with the growth of the mill industry and in 1895 Mr. Wadia took into partnership his sons Messrs. Cursetjee, Nusserwanji and Rustomji, who co-operated zealously with their father, the superior technical training of Messrs. Cursetji and Nusserwanji (now Sir Nusserwanji Wadia, K.B.E., C.I.E.), proving of special value in extending the firm's operations. After the death of Mr. Nowrosjee Wadia in 1899 the responsibilities of managing the firm devolved chiefly on Sir Nusserwanji his brother Mr. Cursetji having retired from the partnership in 1905. Messrs. Nowrosjee Wadia & Sons are agents for the Bombay Dyeing and Manufacturing Co., Ltd., which includes the Textile Mill and the Spring Mill, two of the most successful and prosperous of cotton mills in the city.

In addition to these concerns Messrs. Nowrosjee Wadia & Sons have designed and equipped a large number of cotton spinning and weaving mills complete with power plants, gearing and other accessories. These concerns have worked with the highest efficiency and economy which has been due as much to the quality and finish of the machinery as to the technical knowledge and experience of the late Mr. N. N. Wadia, C.I.E., who was the first Indian to act as consulting expert and adviser to the Bombay millowners from the early stage of the mill industry, and his high reputation and prestige as the doyen of mill managers and engineers was maintained till his death in 1899. His son, Sir Nusserwanji, has also had the advantage of practical training in a cotton mill and in addition to his extended experience as a millowner he has had exceptional opportunities of keeping himself in touch with the improvements and progress in textile manufactures and in mechanical and electrical engineering. These qualifications have helped materially towards the expanse of the business of Messrs. Nowrosjee Wadia & Sons as designers of textile factories and machinery suppliers.

In connection with cotton mills the firm has been closely associated with the Indian business of Messrs. Platt Brothers & Co., Ltd., and Messrs. Hick Hargreaves & Co., Ltd., their present Agencies being as under :—

Platt Bros. & Co., Ltd.,	Oldham ..	.. Textile Machinists.
Hick, Hargreaves & Co., Ltd.,	Bolton ..	.. Engineers & Millwrights.
Wilson Bros. Bobbin Co., Ltd.,	Liverpool ..	.. Bobbins & Shuttles.
Eadie Bros. & Co., Ltd.,	Manchester ..	.. Ring Travellers & Rings.
Wilcock Bros.,	Ashton-under-Lyne ..	Leather Manufactures.
Thos. Hardman & Sons, Ltd.,	Bury ..	.. Woollen Manufactures.
Superior Glazebrook & Co., Ltd.,	Manchester ..	.. Oil Refiners.
P. K. Miller & Sons,	Paisley ..	.. Healds and Reeds.
The Automatic Sprinkler Co., Ltd.,	London ..	.. Sprinklers and Fire Pumps.
John Brandwood,	Birkdale ..	.. "Turbo" Humidifiers.

MR. SHAPURJI SORABJI, M.I.M.E.

Messrs. Sorabji Shapurji & Company.

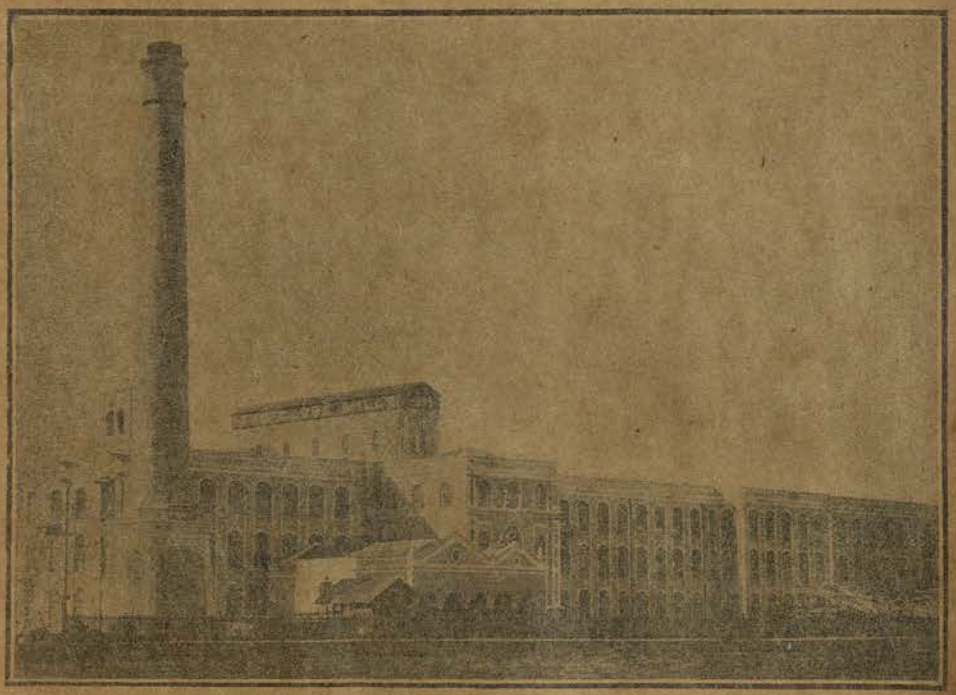
This firm was founded over 75 years ago by an enterprizing Parsi engineer Mr. Sorabji Shapurji who established the Bombay Foundry and Iron Works in this city in 1850. This was the pioneer factory of its kind in Western India and from the account of its enterprizing founder which appears on another page, it will be seen that the business of cotton machinery agents was added to the general activities of the firm in 1887 by Messrs. Shapurji Sorabji and Ratanshaw Dadabhoy. The time proved appropriate for this extension of the firm's business as the cotton mills in Bombay were not only increasing in number but the existing mills were renovating their machinery and Messrs. Sorabji Shapurji & Co. succeeded in securing a good business for the manufacturers they represented including Messrs. Brooks & Doxey, Ltd., Manchester, Butterworth and Dickinson, Ltd., Burnley, and John Musgrave & Sons, Ltd., Bolton. The cotton machinery imports of Messrs. Sorabji Shapurji & Co. have been kept up since this period with the addition of the revolving flat carding engines by Messrs. Elijah Ashworth of Manchester, which were introduced for the first time by them in India.

It is at the same time interesting to note that Mr. Shapurji Sorabji, the senior partner of the firm, who had received his early training at the Works of Messrs. Hick Hargreaves & Co., Ltd., Bolton, secured on his return to Bombay in 1887, important contracts for cotton machinery, engines, boilers, etc., which were placed with Messrs. Hick Hargreaves, Platt Brothers and Asa Lees, before his firm took up regular Agencies as above described.

In connection with the supply of machinery to the cotton mills, Messrs. Sorabji Shapurji & Co. have ranked among the large importers since 1887, their present Agencies being as under:—

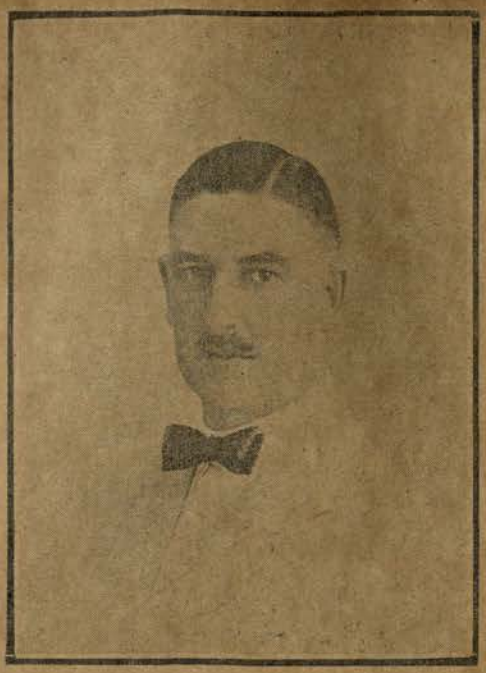
Elijah Ashworth,	Manchester ..	.. Revolving Flat Cards.
Butterworth & Dickinson, Ltd.,	Burnley ..	.. Looms.
Joseph Stubbs Ltd.,	Manchester ..	.. Winding & Doubling.
Carels Disel & Steam Engines (London), Ltd.,	London ..	.. Steam and Uniflow Engines.
A. A. Van Acker,	Gent, Belgium	.. Gearing.
George Hargreaves & Sons, Ltd.,	Blackburn ..	.. Pumps and Ventilators.

THE LATE MR. RATANSHAW DADABHOY, A.M.I.C.E.



THE GLOBE MILLS.

The Globe Mills were projected in 1896 by Mr. Shapurji Sorabji and his partner Mr. Ratanshaw Dadabhoy. The Agency was transferred in 1913 for valuable consideration to Messrs. Turner Morrison & Co., Ltd.



MR. H. H. LAKIN, DIRECTOR.

MESSRS. W. H. BRADY & CO., LTD.: DIRECTORS AND OFFICE STAFF, 1926.

From left to right, seated:—Messrs. C. F. Challoner, A. H. Baker, H. H. Lakin, Sir Joseph A. Kay, Kt., Messrs. T. Bradley and D. Moir.

Middle row:—Messrs. R. A. Dorton, L. W. Rigby, A. Matthews, P. Valentine, J. Tinker, L. J. Webb, E. Bradley and K. M. Stewart.

Back row:—Messrs T. Maddock, V. Mathalone, G. H. Taylor, C. M. Mulroney, J. Slater, S. Smith and A. Benson.

Messrs. W. H. Brady & Co., Limited.

This firm was started in Bruce Lane, Fort, in 1895, under the style of Bradbury Brady & Co., by Mr. J. F. Bradbury and Mr. W. H. Brady, two of the best known mill managers of the time. Mr. Bradbury had been connected for several years with the Lakhmidas Mills (now the Dawn) while Mr. Brady had acquired his reputation by the successful management of the David Mills. Previous to 1895 Mr. Bradbury had been able to secure occasional orders for the machinery of Messrs. Asa Lees & Co., Ltd., Oldham, who had also been supplying the Bombay mills through other importers and through the firm of Messrs. Latimar & Co., which consisted of Mr. Isaack Alcock, Mr. Shapurji Bhroacha and Mr. James Latimar. Messrs. Bradbury Brady & Co., however, made the initial start about the period when the mills were on the increase, and their practical knowledge of mill management and machinery helped considerably towards the firm's progress. Mr. John Knowles, who had been connected as engineer with some of the best known mills in Bombay, was taken a partner in the firm in 1899.

In addition to the business of machinery importers the firm started the Empire Dye Works in 1900 and took up the Agency of the Colaba Land & Mill Co. in 1901. This was followed by the agencies of the New City of Bombay Mill, the New Great Eastern Mill, the Sun Mill (now Madhowrao Scindia Mill) and the Bradbury Mills. A change was however made in 1912 when Messrs. Bradbury and Knowles restricted their business as Agents of these mills under the style of Bradbury & Co., while Mr. Brady parted and started business in the same year as Machinery Agent with Mr. (now Sir Joseph) Kay, Mr. Lakin and Mr. Johnson as junior partners, under the style of W. H. Brady & Co., which was formed into a Joint Stock concern in 1913. On the death of Mr. Bradbury in 1916, the agencies of the mills were transferred to Messrs. W. H. Brady & Co., Ltd., with Mr. W. H. Brady as Managing Director and Messrs. J. A. Kay (now Sir Joseph Kay), H. H. Lakin and Wm. Johnson as Directors. The progress of the firm under the management of Sir Joseph Kay has been considerable and in addition to the import of cotton mill machinery they have extended their operations over other classes of factories such as sugar, ginning and other industrial concerns. The working of the several spinning and weaving mills under the agency of Messrs. W. H. Brady & Co., Ltd., have shown marked progress compared with their early history and the firm now controls the largest number of spindles and looms among the European Agency firms in Bombay. Their present Agencies for Joint Stock concerns include the following :—

The Colaba Land & Mill Co., Ltd.
The New City of Bombay Manufacturing Co., Ltd.
The New Great Eastern Spinning and Weaving Co., Ltd.
The Bombay Industrial Mills Co., Ltd.
The Empire Dyeing & Manufacturing Co., Ltd.
The Bombay Uganda Co., Ltd.
The Belapur Co., Ltd.
G. Claridge & Co., Ltd.
The Nasik Tramway Co., Ltd.

MESSRS. W. H. BRADY & Co., LTD.: DIRECTORS AND OFFICE STAFF, 1924.

From left to right, seated:—Messrs. Benson, Mulroney, Slater, Rigby, Smith, Matthews, Valentine, Challoner, Baker, Lakin, Sir Joseph A. Kay, Messrs. Bradley, Moir, Tinker, Webb, Bradley, Stewart, Dorton, Maddock, Taylor and Mathalone.

Second row:—Messrs. Mendes, Abdulla, Bhatkhande, Lobo, Ferrow, Bejonji, Dubash, Phirozsha, Fonseca, Baptist, Pestonji, Rattanji, Miranda, Jamsetjee, D'Souza, Fernandes, Keshaur, Pharasurs, Yeswant, Remedios, Pandit, Redkar, Kanayalal.

Third row:—Messrs. Framjee, Deshpande, Dhunjibhoy, Mistry, Vaman, Iyar, Keshow, Baretto, Kanerikar, Isaac, Abdul, Kadam, Rodricks, Fernandes, Remedios.

Back row:—Messrs. Judha, Devrukar, Penha, Vaikar, Pawvalla, Sane, Menon, Siqueira, Remedios, Baretto.

Among the machinery manufacturers represented by Messrs. W. H. Brady & Co., Ltd., are the following :—

W. H. Allen Sons & Co., Ltd.,	Bedford ..	.. Engines & Pumps.
Andrew Machine Construction Co.,	Stockport ..	.. Humidifier.
Asa Lees & Co., Ltd.,	Oldham ..	.. Cotton Machinery.
Lang Bridge Ltd.,	Accrington ..	.. Finishing Machinery.
H. F. Cockill & Sons, Ltd.,	Cleckheaton ..	.. Leather Belting, etc.
Cook & Co. (Manchester), Ltd.,	Manchester ..	.. Spinning & Card Strippers.
Davidson & Co., Ltd.,	Belfast ..	.. Sirocco Fans.
Dicks Asbestos Co., Ltd.,	London ..	.. Asbestos Packings.
Franklin Process Co.,	Boston, U.S.A	.. Dyeing Machinery.
Gum Tragasol Supply Co., Ltd.,	Hooton ..	.. Sizing Materials.
Hall & Stells, Ltd.,	Keighley	.. Woollen Machinery.
Hoffman Sprinkler Co., Ltd.,	Manchester ..	.. Sprinklers.
Hopkinson's Ltd.,	Huddersfield	.. Boiler Mountings.
George Keighley Ltd.,	Burnley ..	.. Cotton Looms.
Hugh Kershaw & Sons, Ltd.,	Messley ..	.. Roller Cloth, etc.
Oldham Rope & Twine Co., Ltd.,	Oldham ..	.. Bandings & Ropes.
Hans Renolds Ltd.,	Manchester ..	.. Power Transmission Chains.
Wm. Schofield,	Oldham ..	.. Reels.
David Sowden & Sons, Ltd.,	Shipley ..	.. Woollen Looms.
Universal Winding Co., Ltd.,	Boston, U.S.A.	.. Leesona Winding Machinery.
Wilson & Ingham,	Mirfield ..	.. Card Clothing.
Wm. Whiteley & Co., Ltd.,	Huddersfield	.. Woollen Finishing.
Wilson Bros. Bobbin Co., Ltd.,	Todmorden ..	.. Bobbins & Shuttles.

Messrs. Duncan Stratton & Co.

This firm was established in 1879 by Mr. F. W. Shallis in his own name and as an expert in the cotton pressing and seed crushing industries. Mr. Shallis made his way with considerable success and finally evolved, with Messrs. Nasmyth Wilson & Co., of Manchester, the Standard half Press and Finisher of the present day. Mr. Daniel Duncan joined Mr. Shallis in 1899 and the firm was styled "Shallis & Duncan." The business increased and on the retirement of Mr. Shallis in 1901 Mr. F. B. Stratton joined the firm which extended its operations still further in 1903 under the style of Duncan Stratton & Co., with Mr. F. Harwood as an additional partner. While the firm has been particularly interested in ginning, pressing, seed crushing and flour milling machinery, they have also been appointed Agents for cotton machinery, their present Agencies being as under :—

Brooks & Doxey (1920) Ltd.,	Manchester ..	.. Cotton Machinery.
Lord Brothers	Do.	.. Do.
Robert Hall & Sons, (Bury) Ltd.,	Bury	.. Looms.
Sir James Farmer Norton & Co., Ltd.,	Manchester ..	.. Bleaching & Finishing.
Sulzer Bros., Ltd.	Winterthur ..	.. Steam & Diesel Engines

Messrs. H. M. Mehta & Co.

The firm of Messrs. H. M. Mehta & Co. was started by Mr. H. M. Mehta in 1897 and restricted its operations at first to the importation and supply of cotton mill stores. A company was formed for this purpose in 1897 under the style of the Mill Stores Co., Ltd., with a capital of Rs. 50,000 of which only Rs. 15,000 was called up, but a reserve fund of Rs. 1,00,000 was made up in five years from the profits in the midst of keen competition and the paid-up capital was increased to Rs. 1,00,000. The firm then extended its business operations and took up agencies for the Victoria Mills, the Jubilee Mills, the Raja Goculdas Mills and other industrial and Insurance concerns. The business of machinery agents was added in 1907, the name of Messrs. H. M. Mehta & Co. being closely associated with the expanse of the Indian business of Messrs. Dobson & Barlow, Ltd., Kay and Wilkinson, Hacking & Co. Ltd., Wilson & Co., (Barnsley), Ltd., and other well-known Lancashire manufacturers and mill suppliers as under :—

Dobson & Barlow, Ltd.,	Bolton ..	.. Spinning Machinery.
Hacking & Co., Ltd.,	Bury ..	.. Weaving Machinery.
J. H. Riley & Co., Ltd.,	Bury ..	.. Finishing Machinery.
S. Baldwin & Heap, Ltd.,	Burnley ..	.. Beam Dyeing Plant.
Geo. Saxon, Ltd.,	Manchester	.. Engines & Gearing.
J. Hodgkinson & Son,	Blackburn ..	.. Shuttles.
Kay & Wilkinson, Ltd.,	Bury ..	.. Beltings & Leather Goods.
Wilson & Co. (Barnsley), Ltd.,	Barnsley ..	.. Bobbins.
Porritts & Spencer, Ltd.,	Bury ..	.. Roller Cloth & Woollen Goods.
Goodbrand & Co., Ltd.,	Stalybridge ..	.. Economisers & Warping.
Clarke & Vigilant Sprinkler Co., Ltd.,	Manchester	.. Humidifiers.
Robert Barker, Ltd.,	Heywood ..	.. Healds & Reeds.
James Taylor & Sons (Cleckheaton) Ltd.,	Cleckheaton	.. Card Clothing.
Joshua Kershaw & Sons, Ltd.,	Bolton ..	.. Roller Skins.
Hurburger Gummiwaren Fabrik	Hamburg ..	.. Rubber Goods.
Thomas & J. Walton,	Todmorden ..	.. Pickers.
Hardman Ingham & Dawson, Ltd.,	Oldham ..	.. Cotton Ropes & Bandings.

Messrs. Turner Hoare & Co., Ltd.

This firm was started in the year 1895 as a general engineering and motor vehicle importing agency but the business has since been extended and Messrs. Turner Hoare now hold the following agencies in connection with the cotton mill industry :—

British Thomson-Houston Co., Ltd.,	Rugby ..	.. Electric Motors, Generators.
Waygood-Otis, Ltd.	London ..	.. Electric and Hydraulic Lifts.
F. Reddaway & Co., Ltd.,	Pendleton ..	.. Belting, Hose.
Pyrene Co. (India), Ltd.,	Calcutta ..	.. Fire Extinguishers.
Petters, Ltd.,	Yeovil ..	.. Oil Engines.
Lee, Howl & Co., Ltd.,	Tipton ..	.. Boiler Feed Pumps.

Messrs. Felber Jucker & Co., Ltd.

Among the British export houses which have opened branches in Bombay the firm of Messrs. Felber Jucker & Co., Ltd., has been one of the oldest and most intimately connected with the textile and allied industries of India. It was founded in 1860 by Mr. Jean Felber, a naturalised British subject of Swiss origin, and was converted subsequently into a Limited Company, all the directors and shareholders being British subjects. In addition to the Head Office in Manchester the firm has branches in London, Johannesburg, Augsburg, Gothenburg, Vienna, Zurich, Taann (Alsace) and Buenos Ayres. The firm owns Steamship Companies and deals in timber, paper, asbestos cement products, machinery and coal. The Bombay business includes textile and general machinery, mill stores and sundries, Egyptian and American yarns, etc. Messrs. Felber Jucker also own valuable patent rights in connection with textile and paper-making machinery and asbestos cement products. The Bombay office was opened about the year 1895 and has since then imported machinery, etc., from various makers including the following :—

John Hetherington & Sons, Ltd., (Curtis, Sons, & Co.)	Manchester ..	.. Cotton Machinery.
Horsfall & Bickham, Ltd.,	Pendleton ..	.. Card Clothing.
Wm. Dickinson & Sons,	Blackburn ..	.. Looms sizing, etc.
Henry Tetlow & Sons,	Manchester ..	.. Reeds and Healds.
Andrew Machine Construction Co., Ltd.,	Stockport ..	.. Humidifiers.
John Hall Bobbin Co., Ltd.,	Oldham ..	.. Bobbins.
"Etablissements" J. De Tayrac,	Lille (France)	.. Picking Bands, Chrome Belting.
Galloways Ltd.,	Manchester ..	.. Engines and Boilers.
John Naylor & Son, Ltd.,	Dudley ..	.. Belting.

Messrs. John Musgrave & Sons, Ltd.

While Messrs. Musgraves had been represented in previous years by Messrs. Sorabjee Shapurjee & Co. and other Indian agents, they had sent out their own experts and representatives from time to time and among those who visited Bombay in recent years we may mention Messrs. Walter Wolstenholme, J. Hardman, H. A. Stott, F. Berry, P. H. Ormston and P. Wild. However, at the early period of the mill industry in Bombay visits were paid by Mr. Walter Musgrave and Mr. Frank Musgrave, son and grandson respectively of Mr. Joseph Musgrave, the founder of the firm.

The Bombay office of the firm has been in charge since 1920 of Mr. D. H. Yates, M.I. Mech. E., M. I. Struct. E., whose experience and technical knowledge of power plants have been of service to the local millowners and engineers.

Agencies of Messrs. Sulzer, Bruderer & Co.

J. J. Rieter & Co., Ltd.,	Winterthur. ..	.. Cotton Spinning and Doubling.
Maschinen Fabrik Tannwald, C.S.R.,		.. Looms.
Ed. Dubied & Co., S. A.,	Neuchatel ..	.. Knitting Machines.
Lebocey Freres,	Troyes (Aube)	.. Knitting Frames.
Ferbois, La Courneuve,	Paris ..	.. Rasheland Preparatory.
A. Heliot,	Troyes (Aube)	.. Finishing Machines for Hosiery.
Etablissements Neu,	Lille ..	.. Humidification and Drying.
Maschinen-Fabrik,	Langental ..	.. Braiding Machines.
Schaerer-Nussbaumer & Co.,	Zurich ..	.. Winding Frames.
Cornely & Co.,	Paris, France	.. Embroidery Machines.
Henry Baer & Co.,	Zurich ..	.. Weaving Looms.
S. R. O. Ball Bearing,	Orlikon ..	.. Roller and Ball Bearings.

MANAGER AND STAFF, BOMBAY OFFICE, 1926.

Standing:—Mr. W. T. Wren, Mr. R. Savage, Mr. N. M. Harrison.
Seated:—Mr. V. K. Pansare, Mr. H. V. May, Mr. A. I. Graham, Mr. W. R. Hawkridge, Mr. F. Saldanha

MANAGER AND STAFF, BOMBAY OFFICE, 1920.

MESSRS. MARSHALL SONS & CO. (INDIA), LTD.

THE LATE MR. JOHN MARSHALL: GAINSBOROUGH.

Messrs. Marshall Sons & Co. (India), Ltd.

Among the British engine builders and machinery makers, Messrs. Marshall Sons & Co., Ltd., of Gainsborough were one of the earliest to have a branch office in Bombay with a show-room. This was about the period 1900 when the increasing demand for their specialities necessitated a suitable display, for ready sales of various kinds of machinery. This arrangement proved successful and in 1919 an Indian Company under the style of Marshall Sons & Co. (India), Ltd., was registered to take over the stock-in-trade and business of the Gainsborough Company which had been established with branches in Calcutta, Bombay, Madras, Lahore, Bezwada, Tanjore and other places. Mr. John Harper, who had been mainly responsible for introducing Messrs. Marshall Sons' business in India in 1899 and expanding it in subsequent years, was appointed Managing Director of the new company, the Bombay Office being opened in 1900. The increase of business in the latter city encouraged the Directors to build extensive premises on Ballard Estate with show-rooms which are reckoned amongst the largest in the country. The Bombay business had been carried on for several years under the supervision and direction of Mr. Frank Harrison who had taken part in the public life of Bombay as a member of the Corporation and as promoter and director of several Joint Stock concerns in addition to his activities as the Managing Director in Bombay of Marshall Sons & Co. (India), Ltd.

Mr. Harper retired in 1921 and Mr. Harrison in 1920 and the Bombay business is now in charge of Mr. A. I. Graham and a competent staff of mechanical engineers and expert salesmen. Besides the specialities of the Works of Messrs. Marshall Sons & Co., Ltd., of Gainsborough, the Indian Company represents the following makers:—

Marshall, Sons & Co., Ltd.,	Gainsborough	.. Steam Engines & Boilers.
Blackstone & Co., Ltd.,	Stamford ..	.. Oil Engines.
Blackman Export Co., Ltd.	London ..	.. Ventilating Machinery, etc;
Boilerine Ltd.,	London ..	.. Boiler compound.
Southwark Manufacturing Co., Ltd;,	London, S.E.	.. Belting.
Hayward-Tyler & Co., Ltd.,	London .	.. Boiler Feed Pumps, etc.
Continental Gin Co.,	Alabama, U.S.A.	.. Saw Gins.

Messrs. Mather & Platt, Limited.

Though established for 100 years at Manchester as manufacturers of textile bleaching and finishing machinery with humidifiers and sprinklers, the firm of Messrs. Mather & Platt, Ltd., did little business with the Bombay mills until about 1896. Previous to this, however, they had sent out machinery for the silk industry in India while their plant and machinery for the cotton factories began to be imported in increasing quantities since they opened out local agencies after 1898. These agencies included and still include well-known firms like Messrs. Greaves Cotton & Co., Nowrosjee Wadia & Sons and Macbeth Bros. & Co., Ltd., who handle the different specialities of the firm. While retaining these connections and to have the advantage of their experts on the spot, Messrs. Mather & Platt opened their own offices in Bombay in 1896.

In regard to bleaching and finishing machinery and electrical motors and appliances the firm has been able to secure orders from a large number of the Bombay factories while the "Grinnell" Sprinkler is very extensively in use not only in the cotton mills but throughout the cotton storage area of the new depots of the Port Trust at Sewree which is illustrated on page 460.

That the co-operation of local machinery importers and agents with the manufacturers' own representatives and staff is of mutual advantage is proved by the extent of Messrs. Mather & Platt's business in this country since the opening of their branches and offices in Bombay and Calcutta.

Messrs. Gannon Dunkerley & Co.

This firm was originally started by Mr. J. Herbert Dunkerley who entered into business as cotton machinery agent in 1895 after his retirement as manager of the Greaves Cotton group of mills. The firm now represents—

Tweedales & Smalley, Ltd.,	Castleton ..	.. Cotton Spinning Machinery.
Thomas Holt, Ltd.,	Rochdale ..	.. Winding, Warping & Reeling.
Charles Cain, Son & Greenwood,	Halifax ..	.. Card Clothing.
John Dixon & Sons, Ltd.,	Steeton ..	.. Bobbin Manufacturers.
Edgar Handley Bros.,	Bradford ..	.. Leather Belting, etc.
Textile Illuminating and Engineering Co., Ltd.,	Manchester ..	.. Textile Humidifiers.
R. Hartley, Ltd.,	Baxenden ..	.. Loom Sundries.
Stork Bros.,	Hengelo ..	.. Steam, Engines, Turbines, Boilers,
C. G. Haubold A.G.,	Chemnitz ..	.. Dyeing, Bleaching, Finishing.
G. Dikkers,	Hengelo ..	.. Steam Pumps, Boiler Fittings.

Messrs. Volkart Brothers.

This is one of the oldest of European houses in India, being started in Bombay in 1851, by the brothers Solomon and John George Volkart, and simultaneously also at Winterthur, Switzerland, the seat to this day of the firm's headquarters. This fact, unimportant though it may have seemed in itself, was nevertheless the beginning of what may be termed an economic revolution, for to Messrs. Volkart Brothers belongs the credit of having been practically the first to open direct trade relations between India and the Continent of Europe. It was the firm of Messrs. Volkart Brothers that loaded the first sailing vessels and steamers for direct shipment to the Continent, and in turn, the first shipments of Continental manufacturers were consigned to India through them.

The growth of the firm since its inception 77 years ago has been rapid and remarkable. Branch after branch was added and fresh buying agencies opened at short intervals, so that the firm to-day commands a buying and selling organisation consisting of nine branches in India, Ceylon and the Straits, and 163 agencies working under them. Under their control they have 13 cotton and coir yarn presses, 9 cotton ginning plants and 1 coffee factory. On July 1st, 1925, the firm had in their service 2,067 employees and 5,150 day labourers and coolies.

For a number of years the selling organisation was entirely centred in the firm's head office at Winterthur. In 1868, however, a branch was opened in London, followed by Bremen in 1920, New York in 1922 and Hamburg in 1925. All these houses possess an extensive but close net of independent selling and buying agents. Finally there must be mentioned two separate limited companies founded by them: Volkarts United Press Co., Ltd., Bombay (1873), and the Nichizui Trading Co., Ltd., Osaka (1919). These also control numerous agencies.

Messrs. Volkart Brothers deal in practically all the important products of India. One article, perhaps, is deserving of special mention, and that is cotton, to the export of which in the past they paid their first and foremost attention. That their endeavours have been crowned with success is evident from the fact that during the last few years they, on various occasions, headed the list of exporters of this commodity in certain parts of the world. Recently they have added departments for power plants, electrical and textile machinery, and represent the following manufacturers:—

Unionmatex,—

Deutsche Spinnereimaschinenbau A.G.	Ingolstadt (Bavaria).	Cotton Spinning Machinery.
W. Schlafhorst & Co.,	M. Gladbach. ..	Winding & Warping Plants.
Gebrueder Sucker,	Gruenberg (Silesia).	Sizing & Hot Air Drying Machines.
C. A. Roscher, Oberlausitzer Webstuhlfabrik,	Neugersdorf (Saxony).	Power Looms, Cotton, Silk.
Zittauer Maschinenfabrik A.G.	Zittau (Saxony). ..	Dyeing, Bleaching, Mercerising.
C. H. Weisbach,	Chemnitz (Saxony).	Tentering, Calenders, etc.
Franz Zimmers Erben,	Warnsdorf (Bohemia).	Roller Printing Machines.
A. Monforts,	M. Gladbach. ..	Doubling, Raising, Shearing.
Ernst Gessner A.G.,	Aue i/Erzg. ..	Finishing Machines.
Th. Blass A.G.,	Seifhennersdorf ..	Felt Calenders & Blow Room.

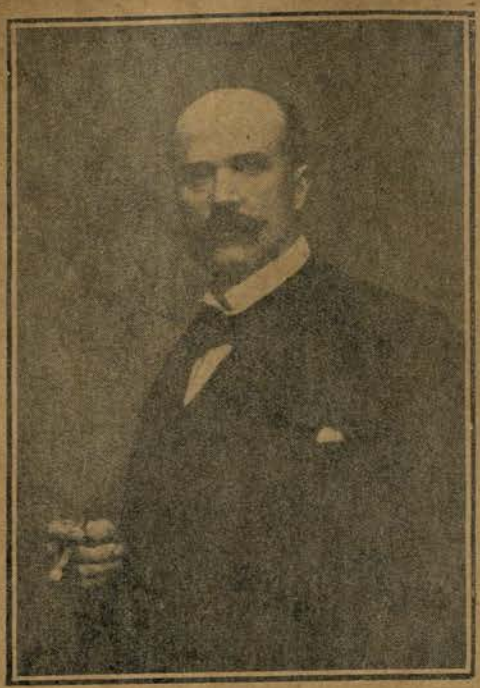
Volkart Bros.—*contd.*

Grossenhainer Webstuhlfabrik A.G.	Grossenhain (S.A.) ..	Wool Looms.
M.A.N. (Machine Works Augsburg-Nuremberg Ltd.)	Nurnberg ..	Diesel Engines.
Brown Boveri & Co., Ltd.,	Baden ..	Turbines and Electric Machines.
Ventilator Ltd.,	Stafa ..	Humidifiers.
Eisenwerk Wulfel,	Hannover ..	Shafting and Gearing.
Gebr Korting A.G.,	Hannover-Linden ..	Air Humidifiers.
Maschinenfabrik Rheydt,	Rheydt	Yarn Moistening.
Grob & Co.,	Horgen	Steel Healds.
Graf & Co.,	Rapperswil	Card Clothing.
Geber, Giese,	Offenbach A. M. ..	Straw Sewing & Cutting.
Ernst Papst,	Aue I. E.	Nickelin Tubes.

Messrs. Giacomo Jucker.

The firm of Messrs. Giacomo Jucker was incorporated in Europe in 1908 with the headquarters in Italy and branches in several parts of the world. The Bombay Office was opened in 1922 and is now in charge of Messrs. Giuseppe F. Formica and Alberto Saibene. The firm are importers of textile and electrical machinery, humidifiers, card dust removing plants, silk plants and mill stores, and represent the following makers :—

Fratelli Marzoli & Co.,	Palazzolo Sull'Oglio (Italy)	Ring, Doubling, and Spinning.
Webstuhl-und Webereimaschinen-fabrik.	Jagerndorf (Czecho-Slovakia)	Weaving Machinery.
Waggon-und Maschinenbau A. G.,	Gorlitz (Germany) ..	Finishing, Dyeing and Bleaching.
Ateliers Roannais de Constructions Textiles.	Roanne (France) ..	Universal Pirnwinders.
Ing. G. Radaelli,	Milan (Italy)	Humidifiers, etc.
Fabbriche Riunite Formenti Ltd.,	Carate-Brianza (Italy) ..	Shuttles and Bobbins.
Hutter & Schrantz,	Vienna	Textile Cloths.
Adolf Seelemann & Sons,	Leobersdorf (near Vienna)	Card Clothing.
Ganz Electric Co., Ltd.,	Budapest (Hungary) ..	Electric Motors and Generators.
Ganz & Co. Danubius Ltd.,	Budapest (Hungary) ..	Pumps, Lighting Sets, etc.
Leobersdorf Machine Works Ltd.,	Leobersdorf (near Vienna)	Diesel Engines.
L. A. Riedinger & Co.,	Augsburg (Germany) ..	Refrigerating Plants.
Soc. Anon. Mino G. B. & Figli,	Alessandria (Italy) ..	Rolling Mills.
Soc. Generale Acetilene E. Saldatura Autogena.	Milan (Italy)	Oxy-Acetylene Welding Plants.



THE LATE MR. J. B. K. MACBETH.

Messrs. Macbeth Brothers & Co., Ltd.

This firm was established in 1885 by Mr. J. B. K. Macbeth who had arrived in Bombay in 1882 to supervise the erection of the engines and other machinery by Messrs. J. & E. Wood of Bolton. The mill industry in Bombay was undergoing rapid development at this period and Mr. Macbeth's skill and practical knowledge as an engineer began to be appreciated by the local millowners. This encouraged him to start a business of his own as machinery agent and importer, his early specialities being the large compound condensing engines required for the cotton mills, the Grinnell Sprinkler which he succeeded in introducing extensively among the factories along with the Vortex Humidifiers. His elder brother Mr. Norman Macbeth joined the business in Bombay in 1885 while retaining his post as manager of Messrs. J. & E. Wood at Bolton. The business of the firm then increased, especially in general engineering including Steam and Oil engines for ginning factories, the Railways and other workshops.

Mr. Norman Macbeth retired from the business in 1913 and Mr. J. B. K. Macbeth took over the entire concern but his death in 1914 necessitated the formation of the firm into a private Joint Stock Company which has been able to extend the scope of its operations in various directions outside of the cotton mills. The present Directors of the Company are Mr. Norman Bruce Macbeth (Chairman) Mr. Leslie Blunt and Mr. F. G. Travers.

The following makers are represented by Messrs. Macbeth Brothers & Co., Ltd.:—

Norris Henry & Gardners, Ltd.,	Manchester ..	.. Oil Engines.
Cochran & Co., Annan, Ltd.,	Scotland ..	.. Boilers.
John Shaw Son & Greenhalgh, Ltd.,	Huddersfield ..	.. Valves, Boiler Mountings, etc.
Unbreakable Pulley & Millgearing Co., Ltd.,	London ..	.. Pulleys, Shaftings and Gearings.
Liverpool Borax Co.,	Liverpool ..	.. Boiler Composition.
Samuel Law & Sons,	Cleckheaton	.. Emery Fillet & Card Clothing.
Shipley Fan Co.,	....	.. Propeller Fans.
E. Green & Sons,	London ..	.. Economisers.
Foamite Firefoam, Ltd.,	London ..	.. Fire Extinguishing Appliances.
Magnolia Antifriction Metal Co., Ltd.,	London ..	.. Antifriction Metals.
Mather & Platt, Ltd.,	Manchester ..	.. Fire Doors.
Branco (1920) Coventry,	....	.. Service Recorders.
National Roofing Co.,	....	.. Roofing Materials.
Royles, Ltd.,	Manchester ..	.. Steam Reducing Valves.

Messrs. Roberts, McLean & Co., Ltd.'s Agencies.

John Morris & Sons, Ltd.,	Manchester ..	.. Fire Engines and Hose.
John Morris (Fire Snow) Ltd.,	Manchester ..	.. Fire Snow Fire Extinguishers.
Ajax Fire Engine Works,	New York ..	.. Chemical Fire Engines.
Dennis Bros., Ltd.,	Quildford ..	.. Trailer Fire Engines.
Rossendale Beltine Co., Ltd.,	Bradford ..	.. Hair & Cotton Beltings.
Bullivant & Co., Ltd.,	London ..	.. Wire Ropes.
The Atlas Metal & Alloys Co., Ltd.,	London ..	.. Antifriction Metals.
The Belting Mfg. Co., Ltd.,	London ..	.. Belt Dressings.
E. Brooksbank Ltd.,	Manchester ..	.. Grease.
Dundee Boiler Covering Co.,	Dundee ..	.. Boiler Composition.
J. Walker & Co., Ltd.,	London ..	.. Packings & Jointings.
Clipper Belt Lacer Co.,	Michigan ..	.. Belt Lacing, Cutting Machines.
Watson Savile & Co., Ltd.,	Sheffield ..	.. High Speed Steels & Tools.
Taylor Instrument Companies,	Rochester, N. Y.	.. Temperature Recorders, etc.
The Western Chemical Co., Ltd.,	Paisley ..	.. Magnesia Boiler Coverings.
S. R. Rowland & Co., Ltd.,	Stockport ..	.. Grinding Wheels.

Messrs. Holt & Co.'s Agencies.

Taylor Lang & Co., Ltd.,	Stalybridge ..	.. Blow Room.
Arundel Coulthard & Co., Ltd.,	Stockport & Preston.	Doubling & Winding Frames.
Scott & Hodgson, Ltd.,	Guide Bridge ..	.. Steam Engines.
Carter Bros. (Rochdale), Ltd.,	Rochdale ..	.. Mill Gearing & Shafting.
J. & W. H. Ormerod, Ltd.,	Denton ..	.. Leather Belting, Pickers, etc.
Joshua Lister & Sons, Ltd.,	Mirfield, Yorkshire ..	Card Clothings.
Walrus Fibre Mfg. Co., Ltd.,	Rochdale ..	.. Fibre Card Cans, etc.
Sykes & Oliver Ltd.,	Littleborough	.. Roller & Cleaner Cloths, etc.
John Lord, Ltd.,	Bacup ..	.. Healds & Reeds.
Richard Leeming & Sons,	Blackburn ..	.. Shuttles.
W. Vaughan Sampson & Co.,	Liversedge, Yorkshire	Hydraulic Leathers, etc.

MR. N. MACLEOD SELKIRK.

MR. A. S. BHARUCHA.

Messrs. Ormerods (India) Ltd., Bombay.

This Indian company of Messrs. Ormerod is affiliated with the old-established firm of Messrs. John Ormerod & Sons, Ltd., Manchester, who have enjoyed a high reputation as makers of leather belting since 1868. They were represented for many years in this country by Messrs. Greaves Cotton & Co., but it was considered of further advantage in 1917 to have a branch of the Ormerod business in Bombay with stocks of the articles which were manufactured by the parent company at Globe Works and at Albion Mills, Castleton. A separate company was registered for this purpose in England under the style of John Ormerod & Sons (Eastern Agency), Ltd., with Mr. N. Macleod Selkirk as Managing Director in Bombay assisted by Mr. Ardeshir S. Bharucha who had been in close touch with the local cotton factories for over 25 years. This arrangement proved satisfactory and in 1920 a company was registered in Bombay under the title of Ormerods (India), Ltd., with a local Board of Directors including Mr. Selkirk who acted as the Chairman with Mr. Bharucha as one of the Directors. This Indian company is still under the capital control of the parent company in England, Messrs. Robert Ormerod and George Ormerod representing the interests of the Indian Company on the Board of the British Company. It is also interesting to note that Mr. William H. Ormerod, the eldest son of the founder of the firm, visited Bombay in the eighties being the pioneer among the belting manufacturers to come out to India. Several subsequent visits were paid by Mr. Ormerod to this country until about 1906 when Mr. N. Macleod Selkirk was placed in charge of the Indian and Eastern business.

In addition to acting as the sole selling agents for the parent company's manufactures Messrs. Ormerods (India), Ltd., are Agents for:—

John Ormerod & Sons, Ltd.,	Castleton ..	.. Leather Belting, Roller Skins.
S. Noton & Sons,	Oldham ..	.. Card Cans, Doffing Boxes etc.
Watson Bros.	Halifax ..	.. Card Clothing.
V. Wilkinson & Sons, Ltd.,	Heysham ..	.. Textile Bobbins.
John Hargreaves (Bacup) Ltd.,	Bacup ..	.. Healds & Reeds.
Willan & Mills,	Blackburn ..	.. Winding, Warping, etc.

Machinery Orders and "The Indian Textile Journal."

Experiences of Bombay Firms.

Messrs. Macbeth Bros. & Co., Ltd.

There is no doubt in our mind that a considerable amount of business has resulted from our advertising in the "Indian Textile Journal."

Messrs. Symington, Cox & Co., Ltd.

We have pleasure in stating that several enquiries are reaching us through the medium of your Journal.

Messrs. Greaves, Cotton & Co., Ltd.

"The Indian Textile Journal" was never more representative of the Textile Trades than it is to-day, by virtue of its articles or by its strength as an advertising medium. It is a very useful publication as regards the high class method of placing advertisements before possible constituents.

Messrs. W. H. Brady & Co., Ltd.

We are pleased to state that we have found your Journal a good advertising medium, and it has invariably brought enquiries for many of the new specialities which we have from time to time advertised in your paper.

Messrs. Nowrosjee Wadia & Sons.

Your largely circulated Journal, from its unique position, is so advantageous to those who desire to bring before the notice of users their manufactures, that it cannot but be to their advantage to fully and freely advertise in it. It is one of the best monthlies of its kind, and so well known and so much appreciated that advertisers will be benefited.

Messrs. Sorabji Shapurji & Co.

During our long connection with the trade we have always found it useful as an advertising medium for the various specialities we handle. Its independent policy has, in our opinion, a good deal to do with its remarkable success.

Messrs. H. M. Mehta & Co.

We have much pleasure to inform you that through the medium of your advertisements we have received good many enquiries from all parts of India for our machinery and stores, and following these up we have secured many handsome orders.

Machinery Orders and "The Indian Textile Journal."

Experiences of Machinery Makers and Exporters.

Messrs. Mather & Platt, Ltd., Manchester and Bombay.

We take this opportunity of commending your advertising columns which we find of great aid to us.

Messrs. Babcock & Wilcox, Ltd., Bombay and Renfrew.

We have pleasure in stating that your Journal is one of the best monthlies of its kind and is a good medium for advertisement.

Messrs. Brunner, Mond & Co. (India), Ltd., Bombay and Manchester.

We continue our advertising in your Journal, which we recognise has a good circulation amongst the mill people generally with whom we are doing a regular business.

Messrs. Giacomo Jucker, Bombay and Milan.

We have pleasure to state that the "Indian Textile Journal" has amply proved to us a paying advertising medium and the proper channel between manufacturers and mill-owners.

Messrs. Felber, Jucker & Co., Ltd., Bombay and Manchester.

That the Indian Textile Journal, as an advertising medium, is a success is amply evidenced by the fact that as a direct result of our advertisements we regularly receive enquiries, many of which develop into actual business.

Messrs. Brooks & Doxey (1920), Ltd., Manchester.

From our own experience we consider the Journal so well edited and the character of the articles so readable, that we are sure it must be a paper that well repays the careful study by all manufacturing firms in India, and, if so, then it fulfils its object for advertising purposes.

Messrs. Scott & Hodgson, Ltd., Manchester.

We have every reason to be satisfied with the results accruing to us through our advertising in your Journal, and we look upon it as the best means of bringing under the notice of millowners and others the various specialities connected with the cotton and other industries.

Men of the Mills: Managers and Assistants.

WHILE the cotton mills of Bombay have been renovated with modern machinery and brought up-to-date in every respect in recent years, the training and qualifications of the mill managers and overlookers have also been maintained at a higher level compared with the period prior to 1890. Reference has been made on pages 288 to 293 to the life and work of Lancashire men in the local factories. The general mill staff—Europeans, Parsis, Hindus, Mahomedans and Jews—has also been dealt with on pages 293 to 314, including the dyers, bleachers, finishers and electrical engineers. Hundreds of these men have toiled from sunrise to sunset under climatic difficulties and labour troubles aggravated not infrequently by undue interference from ignorant or incompetent employers who would not or could not appreciate their work. The managers and overlookers have nevertheless contributed their share towards the progress and success of the spinning and weaving factories along with the mill promoters, financiers, agents and directors. The "Biographical Notes and Sketches" on pages 697 to 732 include managers, engineers and assistants whose service records we have been able to secure. At the same time it has been difficult to obtain photographs and particulars regarding many other deserving men who should have found a place among the brief notices which have been prepared for this publication. We have, however, been able to collect the following notes from the files of the *Indian Textile Journal*:—

MR. H. TOOTILL was engineer of the Oriental Mill at Tardeo for 22 years and until he left for England in 1895.

MR. MEHERALI FAKIRA was superintendent of the Currimbhoy group of mills for many years, and till his death in 1918.

MR. JOHN HAMMETT was connected with the New Great Eastern Mill for nearly 20 years and in 1893 he joined the Star of India Mills.

MR. H. E. ELCHIDANA was engineer for many years at the Dinshaw Petit Mills and had published a book on Engineering and Gearing.

MR. THOMAS BAPTIST had been associated with the Morarji Mill where he spent practically the whole of his career as a manager till his retirement in 1911.

MR. KHURSEDJI D. GHANDY began life as a weaving master at the Alexandra Mill in 1873 and remained there until his retirement in 1899.

MR. NANABHOY BANAJI who died in 1915 had been a carding and spinning master for 40 years of which 30 were spent at the Jamshed Mill.

MR. G.A. SUTHERLAND has been associated for many years as engineer of the E. D. Sassoon group of mills and MR. W. SUTHERLAND with the Currimbhoy Mills.

MR. T. TAYLOR was manager of the Coorla Mills in 1860 and was succeeded by Mr. Joseph Sykes in 1865, when it was converted into the Dharamsey Poonjabhoy Mill. (P. 313.)

Mr. Sorabji Byramji Cardmaster who died in 1904 commenced life at the Royal Mill in 1862 as a carding master and then worked at the Alliance, the Victoria and the New Great Eastern and other mills.

Mr. Sorabji C. Dhondy was weaving master at the New Great Eastern Mill and at the Bombay United Mill before he started business as machinery agent for J. & R. Shorrock, loom makers, Darwen.

Mr. Framji Billimoria has served several of the local cotton mills, being engaged in the industry for nearly 40 years. He was at the Indo-China as manager and also at the New Great Eastern and the Colaba Land Mill.

Mr. N. A. Kandavala has been one of the oldest engineers in Bombay and retired only recently after nearly 55 years' service, his latter years being spent at the Crescent Mills.

Mr. Valabhdas Bhickaji was a practical engineer of the old type since 1876 and was connected with the Colaba Mill in its early days and then with the Khatau Makanji Mill.

Mr. Benjamin Mosley had been associated for many years with the Hindustan Mills and had a happy control over the whole batch of jobbers as will be seen from the group photo on page 303.

Mr. Walter Greenwood (p. 290) had been connected for four years as weaving manager of the E. D. Sassoon and Alexandra Mills and had charge of the large weaving sheds of these well-known concerns.

Mr. H. B. Shepherd (p. 313) held the post of carding and spinning superintendent of all the mills under Messrs. E. D. Sassoon & Co., Ltd., from February 1922 to the day of his death in August 1924.

Mr. William Baldwin spent practically his whole life in Bombay, being weaving master early in 1873 at the Alexandra Mill and then at the Soonderdas Mill, the Jivraj Baloo Mill, and the New Great Eastern Mill.

Mr. Aderji Burjorji Shroff, M.I.M.E., was engineer in charge of the large engines of the Sassoon Spinning and Weaving Mill at Mazagon from 1880 till his retirement in 1915.

Mr. Benjamin Dunkerley came out originally for the Anglo-Indian Mill which was started in Bombay in 1874 by an English Company of Manchester. Mr. Dunkerley also looked after the Greaves Cotton group of mills and retired in 1894.

Mr. Louis Rushworth had been manager of the City of Bombay Mills, the China and Moon mills and the Elphinstone Mill. He also acted as Agent for Messrs. John Hetherington & Sons in 1895 and for Messrs. Felber Jucker & Co., Ltd., in 1894. Died in 1910.

Mr. Pherozshaw Bomenji Jeejeebhoy had been trained at the works of Messrs. Hick, Hargreaves & Co., and acted as manager of the Sassoon Mills from 1892 to 1895, and of the Mazagon Mill in 1896, of the Gordon Mill in 1882, and the Framji Petit Mill in 1902. Was M.I.C.E. and A.M.I.M.E. Died in 1913.

MR. C. E. WILKINSON acted as manager of the Dharamsey Mill from 1878 to 1883 and his administration proved beneficial but he had to leave India after an attack of small-pox and is now in retirement in the old country. MR. R. REDFERN succeeded Mr. Wilkinson and remained till 1887 (page 313).

MR. ARDESHIR C. WADIA was a clever designer of fancy cloth and served the Colaba Land Mills for many years as weaving master and also at the New Great Eastern Mills. In later years he served at the Century Mills and between 1895 and 1900 he supplied new designs and patterns for the weaving articles in the *Indian Textile Journal*.

MR. ALFRED BARRATT (p. 290) was manager of a mill in Bombay in 1895 when he was 27 years of age. He soon left the post because he did not approve of the way in which the mills were managed, and because he thought that the work-people were robbed by the jobbers and others in all directions and the life of an Englishman who knew his work was unbearable. After spending three years in Mexico he came back to another Indian mill, but as it was installed with electric light for night work he refused to stay. Mr. Barratt was one of the founders of the Textile Club in Bombay and its first Secretary and has been absolutely temperate and he says that whisky had been the cause of many evils and many deaths in Bombay.

(*For photographs and groups of Mill Managers, etc., see pages* 33, 196, 219, 222, 290, 303, 306, 312, 313, 314, *and* 502.)

The Bombay Textile Club.

The Bombay Textile Club proved a popular institution for the European managers and overlookers whose principal resort for recreation was the old Green's Restaurant at Apollo Bunder. The Club which was opened in 1893 at Chinchpoogly, afforded a far pleasanter diversion, Mr. Alfred Barratt being one of the founders and the first Secretary. We may recall a few names of the other workers as under:— The Managing Committee consisted of Messrs. Smith, Dawson, Cowen, Willlis, Moseley, Taylor, Williams, Hopwood, and Rowley. Mr. T. Bruce was the President and Mr. Waterhouse the Vice-President. Messrs. Jones and Bountiff acted as Secretaries and Treasurers and Messrs. Barnes and Tattersall as Auditors. The Club was a great success and proved an attraction and a pleasant rendezvous for the cold weather representatives of Lancashire machinery makers. Dances and parties were held while the gathering of Britishers connected with the textile industry during Christmas week had been the largest and most representative in India. The outbreak of plague in 1897 and the famine which followed brought a depression in the mill industry and these and other causes necessitated the closing of the Bombay Textile Club.

Subsequent Associations.

Its place was, however, taken by a more serious and useful organisation which was formed in 1919 under the title of the "Bombay European Textile Association." The objects and working of this Association are explained on page 540 while reference is made on page 669 to the "Bombay Textile and Engineering Association" which was established in 1900 as an educational institution for the members of all communities engaged in the mill industry.

The Bombay Textile and Engineering Association.

ESTABLISHED in 1900 as an educative institution, the Bombay Textile and Engineering Association is indebted mainly for its existence and progress to the initiative and activities of Mr. Cowasji D. Panday, the doyen of mill managers in the textile industry in Bombay. The large number of mill managers, engineers and other overlookers and assistants who are connected with the local cotton mills and with the machinery business, stores, etc., are all eligible for membership in this Association which is intended to supply them with technical information and literature and otherwise keep them in touch with the progress of new inventions, improvements, and processes. The Association also aims at helping its members by giving them information regarding vacancies in the cotton mills and engineering factories. Papers on different questions connected with the textile and allied trades and industries and on technical subjects are read and discussed at the rooms of the Association from time to time and mill managers, engineers and other officers of a mill as well as the apprentices are supplied with the leading technical periodicals which are circulated among members and are kept along with useful reference books in the library of the Association. The total number of members on the roll during 1926 was 150 including mill agents, managers, engineers, etc. The good work done by the Association during its existence of 25 years has been appreciated by the Bombay Millowners' Association which contributes Rs. 500 per year towards its expenses, while the Vice-President, Mr. C.D. Panday, has been making up the annual deficits in addition to his contributions towards the subscriptions of various journals and periodicals required for the use of the members.

The Bombay Textile and Engineering Association has thus been rendering useful service among those engaged in the local factories and in the textile and allied industries, the office-bearers for 1926 being as under:—

President—Mr. J. B. Perit, Mill Agent; Vice-President—Mr. C. D. Panday, Mill Superintendent; Secretary—Mr. E. C. Madon, Mill Manager; Treasurer—Mr. C. M. Badshah, Weaving Master; Honorary Auditors—Messrs. Gharda, Dawar & Co., Incorporated Accountants (London); and Mr. Sorabji B. Tata, B.A.

Members of the Managing Committee—Messrs. F. E. Bharucha, late Director of Industries; J. A. Shroff, Carding and Spinning Master; S. W. Sarangpani, Electrician; H. F. Bamji, M.E., and K. S. Daver, Mill Superintendent.

It should be noted that from three to four Institutions and Associations were formed during the last 15 years among the different sections of engineers and mill assistants in Bombay but the attendance and subscriptions were not sufficient to warrant their continuance. The Bombay Textile and Engineering Association has however been able to tide over its difficulties mainly through the exertions of Mr. C. D. Panday, whose own donations during the existence of the Association would aggregate close upon Rs. 10,000, indicating his zeal and interest for the education and improvement of the mill and factory staff who have not had the opportunities of technical training or who cannot afford to purchase technical books and periodicals. A further facility has also been given to those who cannot pay the full subscription by donations from members and others who make up the full amount in the case of deserving mill assistants.

THE LATE MR. JOHN WALLACE C.E.

THE LATE MR. M. C. RUTNAGUR.

THE LATE SIR BEZONJI DADABHOY MEHTA, KT.

Engineering Works and Foundries.

The Pioneer Factory.

WHILE the firm of Messrs. Sorabji Shapurji & Co. came into prominence in 1890-92 in connection with the machinery business of the Bombay cotton mills, its founder was the pioneer in establishing an iron foundry and workshop in this Presidency. As far back as in 1850, Mr. Sorabji Shapurji, who was working as an engineer in the Military Gun Factory in Bombay, went to England and purchased a plant for an iron foundry from well-known manufacturers like Joseph Whiteworth, Craven Brothers, Wm. Muir, Sharp Stewarts and Crawhall and Campbell. The factory was the first of its kind in the Bombay Presidency and one of the earliest to be started in India. It was situated on a large plot of ground at Khetwady, being known as the "Bombay Foundry and Iron Works" and was fitted with the best of British-made machinery. Mr. Sorabji Shapurji was also careful in his selection of a competent and experienced engineer in the person of Mr. N. C. Richardson who came out as the head of the moulding and engineering department. The business made satisfactory progress and was extended from time to time, and among the large works and foundries which were started subsequent to this pioneer factory were the extensive Iron Foundry and Engineering Works of Messrs. Richardson and Cruddas which were established in 1860 by Mr. Wm. Richardson, the son of Mr. N. C. Richardson, and now rank among the largest of their kind not only in Bombay but in the whole of India and Burmah.

Thus, while the first cotton mill in this Presidency was projected by a Parsi merchant in 1854, the first foundry and iron works were also initiated and started by a member of the same community and led the way towards the expansion of the engineering industries of this country.

In addition to the "Bombay Foundry and Iron Works" Mr. Sorabji Shapurji also put up in 1860 the first flour milling and cotton cleaning and wool burring machinery in Bombay which were supplied by Messrs. Platt Brothers & Co., Ltd., Oldham. His enterprise, however, went still further and in 1865 he ordered out a complete plant for turning out cast iron pipes which were then being imported in increasing quantities from England for the water-works which were being extended by the Bombay Municipality. Every one of these enterprises proved successful and the business progressed till the death of Mr. Sorabji Shapurji which took place in 1869 at the early age of 40. The executors of Mr. Sorabji Shapurji found it difficult to carry on the factory until Mr. Shapurji Sorabji, the grandson of the founder, took charge of the business about the year 1880 assisted by Mr. Ratanshaw Dadabhoy. The "Bombay Foundry and Iron Works" then began to improve and continued to work with varying degrees of success until after an existence of half a century they had to be dismantled in 1913 under the development scheme of the Bombay Improvement Trust.

General Engineering Firms in Bombay.

Alcock, Ashdown & Co., Ltd.
Braithwaite & Co., Engineers, Ltd.
Callender's Cable & Construction Co., Ltd.
Dixon, H. I. & Co., Ltd.
Hill, Son & Knox.
Fleming Shaw & Co.
Ingersoll-Rand, Ltd.
Jacks, William & Co.
Omiar Founding and Engineering Works Co.
Parry's Engineering, Ltd.

THE LATE MR. SORABJI SHAPURJI.

The Pioneer of Foundries and Iron Works in the Bombay Presidency.

THE LATE MR. E. A. GOLL.

MR. SHAPURJI D. BILLIMORIA.

Mr. Billimoria was associated, in the pre-war years, with Mr. Goll in the dyes and colour laboratory of Messrs. Leopold Cassella & Co., in Bombay.

ARRIVAL OF RAW COTTON AT THE GINNERY.

WEIGHING AND DELIVERING THE COTTON FOR GINNING.

A GINNING FACTORY NEAR BOMBAY. [Photo: A. D. Paymaster

Technical Scholarships for Indian Students.

In addition to the facilities afforded by the Victoria Jubilee Technical Institute in Bombay, Indian students proceed to England for higher studies at the various Technological Institutions and Colleges. The British engineering works also admit and train up students and the qualifications and status of Indian youths have consequently been considerably improved in recent years. The encouragement given by Government, in Scholarships, to Indian students to study in England, has enabled a large number of them to join the Manchester School of Technology. The J. N. Tata Education Scheme has also been of great value to deserving scholars who have been able to qualify themselves in technological subjects and obtain remunerative employment in this country, as will be seen from the following list :—

Mr. R. F. Bhathena, Asst. Engineer, P.W.D., Jamrao Canal, Sind.
Mr. F. C. Pavri, Suptg. Engineer, P.W.D., Lahore.
Mr. D. G. Dani, Dy. Chief Engineer, N. W. Ry., Lahore.
Mr. N. J. M. Cursetjee, the Tata Engineering Co., Ltd., Bombay.
Mr. C. Ramachandra Rao, Industrial & Mechanical Engineer, Indore.
Mr. A. Saldanha, Asst. Engineer, E. I. Ry., Calcutta.
Mr. N. N. Sen, A.R.S.M., Asst. Metallurgical Inspector, Jamshedpur.

Another Tata Student, Mr. B. D. Saklatvala, is now serving at the American Vanadium Co. Bridgeville, Pa., U.S.A.

Indian Students in Manchester.

The photograph on the opposite page was taken in Manchester in 1910 on the occasion of the celebration of the *Dewali* festival by some of the students along with friends and their families. The reader will recognise several students in the group who have passed out creditably and have obtained important posts or are engaged in remunerative professional work in India. Mr. Shapurji Saklatvala, M.P. for Battersea, is also in the group with his family.

THE THINKER.

(By Berton Braley.)

Back of the beating hammer by which the steel is wrought,
Back of the workshop's clamour, the seeker may find the Thought,
The Thought that is ever master of iron and steam and steel,
That rises above disaster and crushes it under heel.

* * * *

The drudge may fret and tinker or labour with lusty blows,
But back of him stands the Thinker, the clear-eyed man who knows;
For into each plough or sabre, each piece and part and whole,
Must go the brains of labour which give the work a soul!

* * * *

Back of the motors humming, back of the belts that sing,
Back of the hammers drumming, back of the cranes that swing,
There is the eye which scans them, watching through stress and strain,
There is the Mind which plans them,
Back of the brawn—the Brain!

* * * *

Might of the roaring boiler, force of the engine's thrust,
Strength of the sweating toiler, greatly in these we trust,
But back of them stands the Schemer,
The Thinker who drives things through,
Back of the Job—the Dreamer who's making the Dream come true!

MR. COWASJI S. PETIT, B.A.

MR. KAPILRAM H. VAKIL, B.A. (Bomb.), M.SC. TECH. (Manch.), F.I.C., M.I. CHEM. E.

[*Photo by Warrick Brookes.*

BATCH OF INDIAN STUDENTS IN MANCHESTER, 1910.

Left to right :—

Standing—

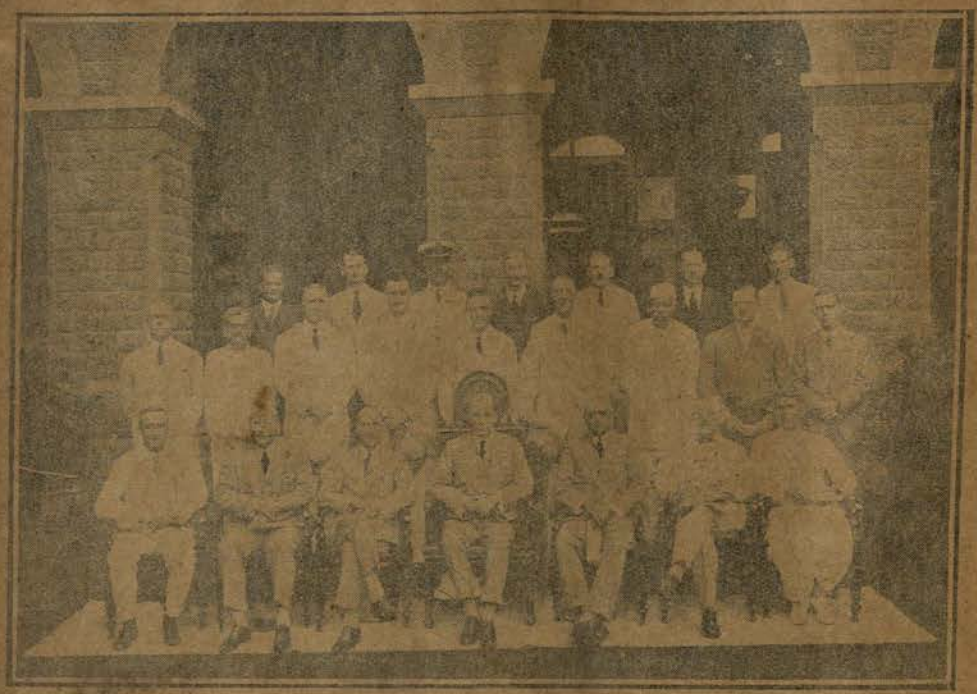
H. K. Dikshit, M. A. A. Khan, S. R. Khosla, K. Prasad, K. J. Bhatt, A. Din, H. Prasad, R. V. Chakradeo, K. H. Vakil, G. N. Dewal, M. N. Basak, E. N. Murti, S. B. Sahasrabuddhe, V. G. Nair, S. Saklatvala, N. D. Yagnik, A. Singh, L. Chand, S. M. Yusuf, B. H. Kantawala, B. L. Pasricha, V. S. Padhaye, V. G. Kirloskar, S. M. Amin, P. Krishana, B. D. Puri, M. Ali, K. P. Thukral, P. C. Dutt, R. Cauty, S. Ghosh, S. Pershad, B. B. Pradhan, R. V. Gurjar, S. Mirza, S. C. Roy.

Sitting—

C. S. Naidu, R. M. Vagifdar, Mrs. Srivastava, Mrs. Seth, S. R. Seth, Mrs. Saklatvala and Baby, R. H. Patuck, J. Srivastava, G. R. Rele.

H. S. Rau, C. V. Chetty, Nurse Girard and Baby Srivastava, Miss A. Marsh and Master Dorab Saklatvala, G. L. Joshi, G. G. Narke.

(*See para on opposite page.*)



TRUSTEES OF THE BOMBAY PORT TRUST FOR 1927. *Clayton & Co.*

(See pages 545 to 556.)

Left to right—Sitting:—Sir Leslie Hudson, Kt., Major-Gen. E. S. Girdwood, C.B., C.M.G., Sir Robert McLean, Mr. W. H. Neilson, O.B.E., V.D. (*Chairman*), Mr. N. B. Saklatvala, C.I.E., Mr. H. B. Clayton, C.I.E., I.C.S., Mr. Laliee Naranjee, M.L.C.

Second Row:—Mr. W. R. Sharpe (*Deputy Chairman*), Mr. M. C. Mattani, Mr. F. C. Annesley, Mr. E. Miller, Mr. A. M. Green, Sir Ernest Jackson, Mr. L. R. Tairsee, Mr. G. L. Winterbotham, Mr. R. D. Bell, C.I.E., I.C.S.

Third Row:—Mr. C. P. Cay, Mr. F. H. Taylor, Commander R. C. P. Price, Mr. J. McClure, Mr. J. R. Reynolds, Mr. H. E. Lees, Mr. N. M. Morris.

THE BACK BAY RECLAMATION, 1926.

Mill Architects and Builders.

The type of mill building, at the early stage of the industry, consisted of a plain three-storied structure lying east and west to escape the glare of the sun. The width rarely exceeded 90 ft. as the lighting depended upon the sun alone. The looms were generally placed in a shed with a saw roof and northern light. Fire-proof floors were subsequently adopted and their weight permitted of the looms being erected in storied buildings without fear of vibration. More space was allowed for the machinery compared with the Lancashire mills and while this increase came to 10 per cent. the space per person was less in Bombay on account of the greater number of hands employed. The building specifications and plans and the plans for the arrangement of the machinery were invariably supplied by the machinery suppliers and the buildings were designed without consideration for Indian requirements. Extensions were made without method or design and the mills contained dark places and corners which were made doubly uncomfortable and stuffy as the glass windows had to be kept closed against wind and rain while the limited openings were often obstructed by the clothes of the operatives who had a fancy for sitting on the window-sills. These conditions continued for many years, the mill buildings being erected by *maistries* and contractors who had no experience of the work. However, the increase in the number of factories opened out a new field for the qualified architects and civil engineers who had established themselves as designers of buildings for residential and office purposes.

The Pioneer Mill Architect: Mr. Nusserwanjee Chandabhoy, C.E.

One of the earliest to take up the designing and building of cotton mills was Mr. Nusserwanjee Chandabhoy, a well-known local architect who had received his diploma in civil engineering in 1846. He had also been appointed professor of the Civil Engineering College at Poona for several years in addition to giving lectures to the Sappers and Miners until about the year 1868 when he started business on his own account. Mr. Chandabhoy was responsible for the designing of important buildings and over a dozen cotton mills in Bombay including the Alexandra Mill, the Nursey Mill, the New Great Eastern Mill and the Colaba Land Mill. Mr. Nusserwanjee Chandabhoy died in 1884, but his sons carried on the business for several years in partnership under the style of "Shapoorjee and Munchershaw N. Chandabhoy." They were entrusted with the designing of the Dharamsey Poonjabhoy, Colaba Land, Jivraj Balloo, the David Mill (No. 1), the Jamshed, Lakhmidas, Currimbhoy (No. 1), Queen, Sun Mill, Assur Virjee, Naranji, Diamond, Tapidas, Globe, Gold Mohor, Sorab, Sassoon, City of Bombay, Ripon and Alliance Mills. This was in addition to mills outside of Bombay.

Messrs. Munchershah N. Chandabhoy & Co.

This firm was started in 1900 by Mr. Munchersha N. Chandabhoy who had prepared the plans for most of the cotton mills referred to in the above paragraph. Since then they have had the designing of some new mills in up-country districts while in Bombay the extensions to the Meyer Sassoon, the Phœnix, the New City of Bombay and the Alliance Mills were designed and supervised by them. Mr. Bomenji M. Chandabhoy, M.S.E. (Lond.), is now a partner in the firm.

THE LATE MR. NUSSERWANJI CHANDABHOY, C.E.

MR. MUNCHERSHA N. CHANDABHOY, F.R.I.B.A., M.S.E. (Lond.)

Messrs. Gostling and Morris.

Messrs. Gostling and Morris who had established a reputation as architects of large residential buildings and offices were also entrusted with the designing of cotton mills, Mr. David Gostling, the senior partner of the firm, being responsible for the preparation of the plans for the Jacob Sassoon Mill in Bombay, the largest among the spinning and weaving mills in India. This firm also designed the Howard & Bullough Mill, the Imperial Mill, the Apollo Mill, the E. D. Sassoon Mill, the Kohinoor Mill, the Finlay Mill, the Currimbhoy Mill (No. 1) and the Pabani Mill, and the extensions of the Alexandra Mill, the Rachael Sassoon Mill and the Standard Mill.

Messrs. Chambers and Fritchley.

Messrs. Chambers and Fritchley—the successors of Messrs. Gostling and Morris—were entrusted with the preparation of the plans for the Tata Mill, one of the largest in Bombay, and the Morarji Mill which has been entirely reconstructed and considerably extended. They also designed the extensions of the Planet Mill, the Edward Sassoon, the Meyer Sassoon and the David Sassoon Mills.

Messrs. W. A. Chambers & Co.

The above firm is now styled W. A. Chambers & Co. and consists of Mr. W. A. Chambers, F.R.I.B.A., Mr. A. Bell, Licentiate, R.I.B.A., and Mr. D. W. Ditchburn, F.R.I.B.A. They have prepared the plans for the extensions of the Morarji Mill and the Edward Sassoon Mill, in addition to up-country mills.

Messrs. Shapoorjee N. Chandabhoy & Co.

While hardly a dozen new mills were erected in Bombay since the year 1905 extensive changes and extensions were undertaken in many concerns, the weaving sheds forming the principal extensions in almost every spinning mill. Defective structures were altered and improved and far greater attention was paid to light and ventilation than was the case in previous years. The following were designed, in addition to up-country factories, by Mr. Burjor S. Jamshedji Aga, of the firm of Messrs. Shapoorjee N. Chandabhoy & Co., which was started in 1907:—Extensions for the Emperor Edward Mill, the Colaba Land Mill, the Union Mill, Jamshed Mill, Sassoon Mill, Lord Reay Mill, Sorab Mill, New Great Eastern Mill, Bradbury Mill, Sun Mill, Victoria Mill, Bombay Cotton Mill, Killachand Mill and the Jam Mill.

THE LATE MR. SHAPOORJI N. CHANDABHOY.
F.R.I.B.A., M.S.E. (Lond.)

MR. BURJOR S. JAMSHEDJI AGA,
F.R.I.B.A., M.I. STRUCT. E., (Lond.), L.C.E., M.I.E.

Messrs. Nowrosjee Wadia & Sons.

The designing of the Bombay cotton mills has not, however, been restricted to the professional architects and civil engineers. From 1884 Messrs. Nowrosjee Wadia & Sons added a department to their machinery business where plans for new mill buildings were prepared which suited the climatic and other conditions peculiar to textile manufactures in this country. In this connection the practical knowledge and experience of the firm in regard to the machinery and processes and the lighting and ventilation of the departments were of special value, the following among other mills being designed and erected by them:—The National Mill, the Dhun Mill, Wadia Mill, David Mill (No. 2), Presidency Mill, Currimbhoy Mill (No. 2), Indo-China Mill, Jehangir Wadia Mill, E. D. Sassoon Mill, Textile Mill, Century Mill, Spring Mill, Pearl, Premier and Kohinoor Mill (No. 2). The extensions of the Crescent Mill and the Pabani Mill were also designed and carried out by this firm.

Messrs. Taraporvala Bharoocha & Co.

Messrs. Taraporvala Bharoocha & Co. have designed and supervised, in addition to up-country mills, the extensions of the Gold Mohor Mill, the Jubilee Mill, the Victoria Mill, the New City of Bombay Mill, the New Great Eastern Mill, the Emperor Edward Mill, the Sassoon Mill and the Framji Petit Mill, some of which are illustrated in the present volume. The two senior partners are Mr. Vicajee A. Taraporvala, F. R. I. B. A., and Mr. Sohrab F. Bharoocha, F.R.I.B.A., and they have recently taken Mr. Merwan P. Katgara, L.C.E., M.R.S.I., and Mr. Eruch A. Tarapore, B.A., B.E., in the firm.

MR. VICAJEE A. TARAPORVALA, F.R.I.B.A.

MR. SOHRAB F. BHARCCCHA, F.R.I.B.A.

Building Contractors.

While the plans and designs for the mills were prepared in recent years by the architects or by the machinery makers and their Bombay agents, the construction of the building was invariably entrusted to local contractors who were experienced in selecting proper materials at the lowest rates and could obtain and control the masons, carpenters and other workmen. The contract work, until about the year 1898, was done mostly by Parsis and Hindus and it is interesting to record that the bulk of these men had no systematic training or education. They could hardly speak or write the English language and read any books relating to their profession. They were essentially practical and in almost every case belonged to the carpenter class and had in fact worked as such in the dockyards or the railway workshops before undertaking contracts on their own account. They could, however, exact work from the labourers and artizans and carry out the instructions of the civil engineer who had prepared the building plans which for many years remained stereotyped in the case of the local cotton mills. The following list represents contractors who were entrusted with the building of new cotton mills and the extensions of existing mills in Bombay city, including Kurla, between 1865 and 1925:—

Cotton Mill Builders.

Alcock Shapoorji Bharucha & Latimer.
Aboo Maistry.
Currim Pirmahomed & Co.
Cowasjee Bhedwar & Co.
Elapa Balaram & Co.
Hirajee Spencer & Co.
Hirjibhoy Mistry.
Jalejar Ardeshur.
Jeewanjee Jamasjee & Co.
Jamasjee Ruttonjee Maistree & Co.
Kaikobad Ardeshur & Co.
Manaji Ragowji & Co.
Nowroji Jamshedji Mistry.
Nagoo Sayaji & Co.
Nusserwanji Rustomji Mistry.
Pestonji Jamasji & Co.
Phirozshaw & Co.
Peroshaw Sorabji.
Pallonji Eduljee & Son.
Pallonji Ratanji & Co.
Palonji Shapurji & Co.
Pestonji Jeewanji & Co.
Ratanji Sorabji & Co.
Sorabji Ratanji & Co.
Shapurji Palonji.
Tejoo Kaya & Co.
Yankoo Baloo & Co.

Constructional Engineers and Builders.

The requirements of the Bombay millowners in respect of up-to-date building construction with adequate lighting arrangement and ventilation and higher speeds for the machinery have encouraged the starting of constructional engineering works on large scales. Prominent among these are the Tata Construction Co., Ltd., who have carried out the extensions to the Colaba Land Mill and the Emperor Edward Mill, the alterations and rebuilding of the David Sassoon Mills being carried out by Phatack and Walchand Ltd.

The other firms of constructional engineers laid out for the cotton mills are :—

Bombay Concrete Construction and Engineering Co., Ltd.
K. S. Dhondy & Co.
J. C. Gammon Ltd.
Marsland Price & Co., Ltd.
Mayashanker, Thacker & Co.
McKenzies, Ltd.
Richardson and Cruddas.
Tata Engineering Co., Ltd.
Walchand Construction Co., Ltd.

Repairs and Replacements.

The requirements of the local cotton mills in regard to the replacement of the gearing, shaftings, wheels and other fittings and the heavy repairs to engines and boilers are being carried out by Messrs. Richardson & Cruddas and other engineering firms. A good deal of constructional and building work is undertaken in Bombay, the plant and equipment in the foundries and the engineering shops being up-to-date and unsurpassed by any similar establishments in the country.

SIR STANLEY REED, KT., K.B.E., LL.D. (Glasgow.)

Sir Stanley Reed encouraged the development of industrial enterprise and local manufactures. The investing public realised the advantage of a colleague of his experience and integrity on the board of joint stock companies, and his name has been honourably associated with the Directorate of some of the most successful of industrial undertakings and public utility concerns in this city. Few Anglo-Indians have had opportunities of coming into closer contact with different shades of public opinion as Sir Stanley Reed whose career as editor of the *Times of India* was marked by conspicuous ability and constant regard for fair criticism and journalistic courtesy. Arriving in this city in 1897 he spent 25 years as a journalist and friend of India guiding her destinies with a righteousness of purpose which gained the esteem and confidence of representative Indians throughout the country. His personality and good offices will be gratefully remembered by his friends and co-workers in the cause of progress and reform, and by the millions of inhabitants whose just wants and aspirations he voiced in a spirit of genuine sympathy and goodwill.—*Indian Textile Journal.*

Financing of the Cotton Mills.

MILL promoters in Bombay had a fairly easy time in financing their projects during the first 20 or 30 years of the progress of the industry. This good luck continued even further and till the yarn trade with China showed signs of diminution. The big margins in profits enabled mill agents and promoters to commence operations as soon as sufficient capital was secured to pay for the building and machinery, the working capital being obtained from the local banks or from friendly depositors and the mill agents themselves. When the banks advanced money the security generally included the liquid assets such as cotton, yarn and cloth in stock and in process of manufacture, in addition to the personal guarantee of the mill agents, and the mill property as security, in some cases. This arrangement worked fairly well during periods of profit but during times of trade depression and financial stringency the mill agents had an anxious time unless they had the intention, which some undoubtedly had, of carrying the concern into liquidation and becoming the owners thereof.

The Bank of Bombay.

The Bank of Bombay made large advances to the mills and this has been continued by the Imperial Bank of India whose financial resources and assistance have helped towards the satisfactory working of several of the most prosperous and well managed of the cotton factories in Bombay. The accommodation has often been secured on very favourable terms which have depended upon the financial stability of a concern and the prestige and guarantee of the managing agents.

Local Banking Enterprise.

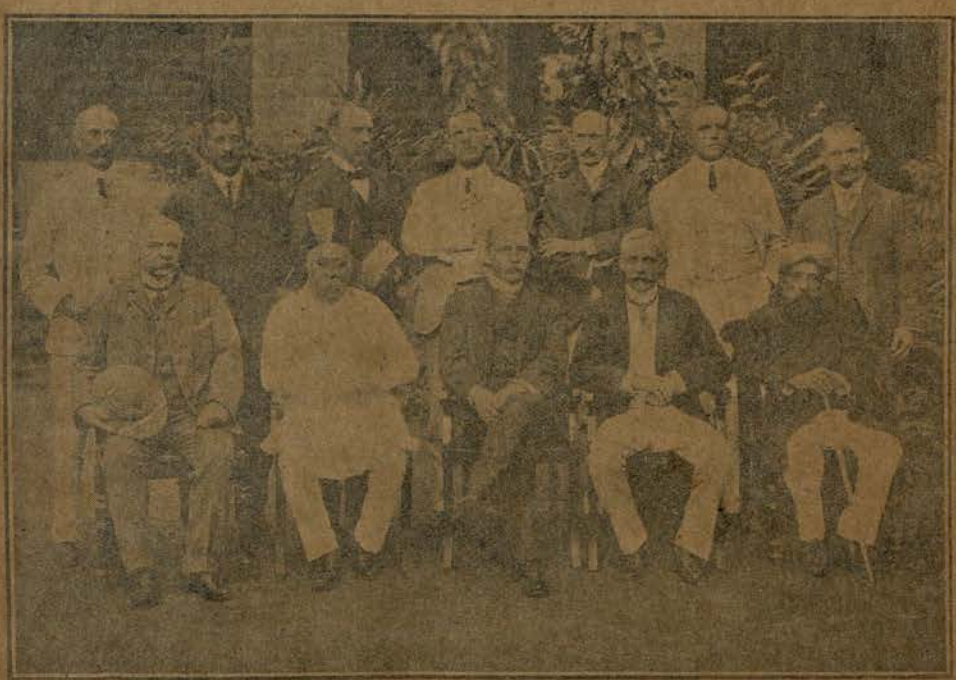
The impetus given to the starting of additional factories and other industrial undertakings after 1906 induced the more enterprising millowners to start Banking concerns of their own instead of depending mainly on the Bank of Bombay for the larger advances. These enterprises were, however, not free, in all cases, from the adventurous and speculative element. The Specie Bank and the Credit Bank of India, which were started about this period, came to grief in a short time and their failure led to the closing down of other concerns which had not been financed adequately or were badly managed.

The Bank of India.

The Bank of India, one of the best managed of local banking concerns, was established in 1906 and owed its conception and successful floatation, in a great measure, to the energy and influence of Sir Sassoon David, Baronet, who worked in the furtherance of its interest and prosperity till the closing days of his strenuous career. The first Board of Directors was representative of all communities and included, besides Sir Sassoon David, Sir Frederick Croft, Sir Cowasjee Jehangir, Bart., Mr. R. D. Tata, Mr. Gordhandas Khatau, Sir Lalubhai Samaldas, C.I.E., Mr. Khetsey Khaisey, Mr. Ramnarain Hurnandrai, Mr. J. H. Dani, Mr. Noordin and Sir Ibrahim Rahimtoola. C.I.E. Mr. H. P. Stringfellow was appointed manager and contributed substantially towards the success of the Bank.

THE LATE SIR PHEROSHAW M. MEHTA,
K.C.I.E.

SIR JAMSETJEE JEJEEBHOY (BART.),
K.C.S.I.



A REPRESENTATIVE GROUP OF BOMBAY CITIZENS AND OFFICIALS IN 1906.

Left to right :—*Standing*—Sir Henry Procter, Sir W. D. Sheppard, K.C.I.E., I.C.S., Mr. R. O. Monteath, Mr. P. R. Cadell, C.S.I., C.I.E., I.C.S., Mr. F. Ritchie, Captain C. H. Hewett, R.N., and Mr. S. W. Bickel.

Sitting—Mr. J. S. Brown, Mr. N. J. Gamadia*, Sir Walter Hughes, C.I.E., Sir Charles Armstrong, and Sir Currumbhoy Ebrahim (Bart.)*.

* Those with asterisks are now deceased.

THE LATE MR. PREMCHAND ROYCHAND.

THE LATE MR. GELABHOY HARIDAS.

MR. SORABJI N. POCHKHANAVALLA.

MR. K. R. SHROFF.

MR. KUVERJI M. MEHTA.

BANKERS AND BROKERS.

The Bank of Baroda.

The Bank of Baroda has also established its reputation as an efficient organisation under the management of Mr. C. E. Randle and his assistant Mr. C. J. Collings. This popular concern owed its conception and floatation to two of the most prominent of Bombay millowners—Sir Vithaldas Thackersey and Sir Lalubhoy Samaldas, whose names have been associated with the promotion and financing of the leading industrial undertakings in this city.

The Central Bank of India.

The Central Bank of India has figured prominently among the investing public and among financiers and company promoters. Its successful floatation has been worthily associated with the name of Sir Phirozshaw Mehta whose zeal and exertions for the development of the city's industrial resources were often covered by his extraordinary activities as a municipal councillor and an ardent political reformer. The Hon. Sir Phiroze Sethna who succeeded Sir Phirozshaw as chairman of the Bank has not only maintained its prestige but has helped towards its further development. Its amalgamation with the Tata Industrial Bank has materially increased its financial status and extended its scope of operations in towns and cities outside of this Presidency. As an institution established mainly with Parsi capital and through Parsi enterprise the Central Bank of India has attained the highest position among Indian banking concerns under the management of Mr. S. N. Pochkhanavala and ranks high in the estimation of financiers and the investing public in all parts of the country.

The Peninsular & Oriental Steam Navigation Company.

THE history of this famous corporation, whose existence dates from 1837, has been marked by steady progress, and it will reach its centenary in 1937 stronger and even better equipped than in any previous year of its life.

Commencing with mail packets under the title of the Peninsular Company, which ran to Lisbon and Gibraltar, the service was soon extended to Malta and Egypt. In 1840 it was incorporated by Royal Charter under the title of the Peninsular and Oriental Steam Navigation Company, and communication with the East began in 1842, when the "Hindostan," a paddle boat of 1,800 tons and 500 horse-power, started for Calcutta by the Cape route. Within two years the overland route was established, carrying passengers by sea to Alexandria and from Suez onward. The services of the P. & O. Company have not been confined to mercantile work alone; the vessels have, on many occasions, rendered valuable aid to the Government in time of war as transports and hospital ships.

The P. & O. Steamers and Yarn Trade with China

The P. & O. Company has also been intimately associated with the working of the mill industry in Bombay. Apart from the carriage of machinery and millwork which have been shipped in enormous quantities from Great Britain for the requirements of the local factories the vessels which were used for the Eastern ports conveyed large quantities of yarn for the China market which was the principal buyer of the productions of the Bombay mills until the Japanese began to spin their own yarn.

Department of Industries.

THE Department of Industries was established in 1917, its administration being vested in the Director of Industries. The main functions of this officer were the promotion of local industrial enterprises by :—

(*a*) Advice and information ; (*b*) the introduction of new methods and improved implements ; (*c*) the management of pioneer and demonstration factories, and (*d*) examination of requests for loans and other concessions and suggestions of the form of assistance required.

The Director also studied the economic conditions of the Presidency from the industrial point of view and collected commercial information and investigated all existing industries which gave promise of local development with a view to rendering them any assistance in his power. He was assisted by an Advisory Committee consisting of persons interested in the trades and industries.

On the technical and industrial side the Department managed a hand-loom weaving section, and had a pottery expert, while part-time services of officers of other departments and institutions were also utilised for technical assistance and advice to the department. The pottery expert investigated the clay resources in several parts of the Bombay Presidency for the manufacture of pottery.

The Department also imparted instruction in mechanical engineering and introduced a system of apprenticeship at the workshops at Daupuri for the training of boys as skilled tradesmen such as fitters, turners, machine hands, etc. It had also instituted scholarships for the study of advanced industrial chemistry and electrical engineering.

The commercial investigations included the manufacture of fish oil, vegetable oils, casein, matches, paper pulp from bamboos, turpentine and rosin and the utilisation of the bitterns at the Kharaghoda salt-works.

Mr. R. D. Bell, C.I.E., I.C.S., acted as Director of Industries from 1919 to 1924 in which year Government decided to abolish the post of Director of Industries and the main activities of the Department were relegated to other officers.

In 1925 the Council suggested a reorganisation of the Department under an Indian Director and Mr. F. E. Bharucha, L.M.E., M.I.M.E., M.I.E., was selected for the post, and continued the work of the reorganised department up to the end of March 1927. Since then the post of Director of Industries has been vacant, and pending the report of a Committee of Enquiry appointed in 1926, the work of the Department is in temporary charge of the Collector of Bombay.

Dyeing and Bleaching Experts in Bombay.

The following is the list of dyeing and bleaching experts in Bombay who are not employed in the cotton mills :—

Mr. R. N. Wacha.
Mr. Gustadji D. Billimoria.
Mr. K. H. Doongaji.
Mr. Jehangir Dubash.
Mr. Erachshaw Palkhivala.
Mr. Naoroji Baria.
Mr. Naoroji Bhathena.
Mr. Merwan S. Bharucha.
Mr. C. J. Billimoria.

SIR LESLIE HUDSON, KT.

THE P. & O. Co.'s BOMBAY OFFICE : SUPERINTENDENT AND MEMBERS OF THE STAFF IN 1906.

Standing :—Mr. R. R. Wright, Mr. W. L. Firth, Mr. J. W. Ireland, Mr. E. A. Williams.

Sitting :—Mr. W. Birkett, Mr. A. H. B. Froom (now Sir Arthur Froom), Mr. Frank Ritchie, Capt. F. R. Summers, Mr. E. C. Richards.

On the Carpet :—Mr. R. K. Franks, Mr. E. Walker, Mr. G. M. S. Gordon.

Mr. FRANK NOYCE, C.S.I., C.B.E., I.C.S.

Mr. FRANK RITCHIE.

Hon. Sir ARTHUR FROOM, Kt.

Mr. R. D. BELL, C.I.E., I.C.S.

Cotton Textile Industry Enquiry.

THE following is the Resolution of the Government of India on the Indian Tariff Board Report, the decisions of Government on the subject being published on pages 6 and 7.

Government Resolution.

On the application of the Bombay Millowners' Association, the Government of India appointed a special Tariff Board in June, 1926, to investigate the condition of the cotton textile industry, to examine the causes of the depression, and in particular to consider whether the depression was due to the competition of other countries. The Board was instructed to report whether the industry was in need of protection and, if so, in what form and for what period protection should be given. The Board was further instructed to make any other recommendations germane to the subject.

Findings of the Tariff Board.

The Board has found that the present depression is largely due to causes which are not peculiar to India, but are world-wide in their operation. In India itself the depression has been much more acutely felt in Bombay than in other centres, and the Board attributes this state of affairs partly to causes for which the millowners themselves are responsible, partly to the competition of the mills in other parts of India, and partly to competition from Japan. Under the first head, stress is laid on undue conservatism and insufficient diversification of production, while the relative prosperity of the mills in other parts of India is ascribed mainly to the natural advantages they possess, particularly in a lower rate of wages, and also in their proximity to their markets and to the areas from which they obtain their raw material. The Board has emphasised the importance of the increasing competition of the mills in other parts of India as a menace to the industry in Bombay, and considers that it constitutes a problem not less urgent than that which arises from competition from abroad.

The Board has found that the competition from abroad, from which the Bombay mill industry is suffering, is from one country only. It was not contended by the Bombay Millowners' Association that either the volume of the imports from the United Kingdom or the prices at which they were sold, had in any way been a contributing cause of the present depression; and in regard to imports from all countries other than Japan, the Board has found that there has been no change to the disadvantage of India as compared with the pre-war position. On the other hand, Japanese competition is severely affecting the industry in respect both of yarn and piecegoods, and in so far as this competition is facilitated by inferior conditions of labour in Japan, the industry has, in the Board's view, established its claim to protection against it. The inferior conditions particularly referred to arise from the provision of the Japanese Factory Law which permits for the present the employment of women by night, and thereby enables the Japanese mills to work double shifts. The advantage to the Japanese mills in the actual cost of manufacture, according to the Board's estimate, is about 4 per cent. on both yarn and cloth; but if a reasonable return on capital is included in the cost of production the advantage increases to 10 per cent. on yarn and 12½ per cent. on cloth. The Japanese mills will, the Board thinks, retain their advantage until the date when the amended Factory Law comes into full operation, which is expected to be the 1st July, 1929; and in that case any influence on the market of stocks accumulated before that date should have disappeared by the end of the official year 1929-30. All the findings of the Board which have been mentioned are unanimous, except as regards the estimated advantage to a Japanese mill working double shifts, if a fair return on capital is included in the cost of production.

Recommendations of the Tariff Board.

In addition to a number of detailed recommendations directed towards the improvement of the internal organization of the industry, which cannot be summarised here, the Board has made two important recommendations designed to assist the industry in securing greater diversification of production, and to stimulate a larger output of goods of higher quality. The first is the establishment, with financial assistance from Government, of combined bleaching, dyeing and printing works at Bombay. This recommendation is unanimous. The second, which is put forward by a majority of the Board, is for the payment, for a period of four years, of a bounty of one anna per pound, or its equivalent, on the production of yarn of 32s and higher counts, based on the output of an average of 15 per cent. of the total working spindleage in a mill. The cost of this bounty, including the cost of administration, is estimated to be about Rs. 39 lakhs per annum. The President of the Board (Mr. Noyce) dissents from this recommendation.

A majority of the Board has proposed that the import duty on cotton piecegoods should be increased from 11 to 15 per cent. for a period of three years. The primary object of this increase is to provide funds to meet the cost of the proposed bounty on the spinning of the finer counts, and of certain other proposals made by the Board, but it will also serve to reduce the rigour of the competition from Japan from which the industry suffers. No increase in the duty on yarn is recommended by the majority in view of the effect that such a measure might have on the handloom industry. The President of the Board (Mr. Noyce) does not consider that an all-round increase in the import duty on piecegoods can be justified, but has recommended that an additional duty of 4 per cent. should be imposed on all cotton manufactures, including yarn, imported from Japan for a period of three years.

The Board has proposed several other measures for the assistance of the industry by Government. Most of these are under separate consideration, and only one can be mentioned here. The Board has unanimously recommended the remission of the import duty on cotton textile machinery and on certain mill stores for a period of three years, after which the question of continuing the remission would be considered in the light of the conditions then existing. The loss of customs revenue from this remission, according to the Board's estimate, is about Rs. 50 lakhs per annum.

Finally, the Board emphasises its view that the State aid and the changes in the tariff which it has proposed can, in themselves, prove no more than palliatives, and would indeed fail in their purpose if they did not succeed in stimulating and encouraging the industry to undertake reorganisation and effect economies on the lines suggested.

Summary of the Tariff Board Report.

In summarising their findings the Tariff Board stated as under :—

(1) The most striking feature in the history of the cotton textile industry in India from 1899 to 1928 is the expansion in every direction, especially in weaving.

(2) Other important features in the history of this period are the loss of the export trade in yarn, the gradually decreasing dominance of Bombay and the increasing share of Japan in the import trade.

(3) The present depression in the cotton textile industry has been and is much more acutely felt in Bombay than in other centres.

(4) The mills which have spinning departments only have been affected to a greater extent than mills which have both spinning and weaving departments.

(5) The demand for protection has not been as earnestly pressed from other centres as from Bombay and Ahmedabad.

(6) The altered relation between agrarian and general prices since 1920 has contributed to the depression in the industry.

(7) The boom and the depression in India have presented all the features which characterise a trade cycle.

(8) The course of American cotton prices has contributed to the depression in the industry.

(9) The competition of Japanese yarn exercises a depressing effect on the price of Indian yarn.

(10) Japanese yarn of 32s counts is being sold at a price which is practically equal to the cost of manufacture alone of yarn of this count in India without any allowance for profit or depreciation.

(11) In cloth of the lower counts, that is, in drills and sheetings, Indian mills are able to hold their own and it is, therefore, doubtful whether the Japanese imports in these lines control prices in India.

(12) In cloth of counts of 30s and above, the cost of manufacture alone in Indian mills is either practically equal to or higher than the Japanese sale price and Japanese competition, therefore, exercises a depressing effect on the prices of Indian mill production.

(13) The depreciation of the Japanese exchange, while it lasted, stimulated exports from Japan to India but Japan now enjoys no special advantage in regard to exchange.

(14) Double shift working in Japan gives the Japanese industry an advantage of 4 per cent. on the actual cost of manufacture both of yarn and cloth. This advantage is considerably increased if a reasonable return on capital is included in costs of production.

(15) It does not appear that mills in Japan can, as a rule, obtain higher prices in the home market than they can from exports and a charge of dumping in the usual sense of the word cannot, therefore, be substantiated.

(16) Conditions of labour in Japan are inferior to those in India in respect of hours and the employment of women and juveniles at night.

(17) It must, therefore, be held that there is unfair competition between Japan and India and that this competition is an important cause of the present depression in the cotton textile industry.

(18) The stabilisation of the rupee at 1s. 6d. coming as it has done at a time of falling prices, has rendered the problem presented by the disparity between prices and wages in the industry somewhat more pronounced.

(19) Over-capitalisation has contributed to accentuate the depression in Bombay.

(20) The dividends paid by the Bombay industry during the boom period were unduly high.

(21) Except to the extent that defects in the managing agency system such as undue conservatism and lack of initiative have contributed to the present depression, that system cannot be held to be responsible for existing conditions.

(22) The use of inefficient machinery cannot be held to have affected the industry to any appreciable extent.

(23) Difficulties in arranging finance both by mills and dealers in piecegoods have contributed to accentuate the depression.

(24) The loss of the China trade in yarn is an important cause of the present depression in Bombay.

(25) The loss of the export trade in yarn has not been compensated appreciably by an increase in the export of piecegoods.

(26) The increasing competition of mills in Ahmedabad and other centres is also an important cause of the present depression in Bombay.

(27) Greater attention to diversification of production, more direct contact with consuming centres and greater alertness on the part of commission agents would to some extent have mitigated the severity of the depressions in Bombay.

(28) The depression in India has not been accompanied by any decrease in production but over-production cannot be held to be a cause of the depression.

(29) Labour costs in Bombay are markedly higher than those in other centres.

(30) High labour costs in Bombay cannot be held to have caused the depression but they have undoubtedly accentuated it.

(31) High local taxation has added to the difficulties caused by the depression in Bombay.

(32) Examination of the figures of cost of production in the various centres shows that by far the greatest disability in costs of manufacture from which Bombay suffers in comparison with Ahmedabad and other up-country centres is in its high costs of labour.

(33) Bombay is under substantial disadvantages as compared with other centres in regard to cost of fuel and power, cost of water and higher local taxation, but these appear to be rather more than offset by advantages in regard to cost of stores, of insurance and of office expenses.

(34) In regard to supplies of raw material the balance of advantage as compared with other centres is, on the whole, against Bombay.

(35) Proximity to local markets is a factor which operates appreciably to the benefit of the mills in up-country centres.

(36) To the extent that the depression in the cotton textile industry in India is the outcome of the cyclical character of trade, it is not of a permanent nature.

(37) It is impossible to express a definite opinion as to how far foreign competition can be regarded as a permanent cause of depression.

(38) The loss of the China trade in yarn must be regarded as a cause of depression which is of a permanent character.

(39) Whether the increasing competition with the Bombay industry of Ahmedabad and other up-country centres is a temporary or permanent cause of depression must depend on the steps taken by the Bombay industry to meet it.

(40) In regard to the purchase of raw material in Bombay, a single hedge contract is the ideal to be aimed at but, in the meantime, proposals on the lines of the scheme put forward by Messrs. Forbes, Forbes, Campbell and Company for reducing the number of the existing hedge contracts and widening their scope should again be placed before the Representative Committee of the East India Cotton Association.

(41) Managing agents would be well advised to employ brokers who do not operate on their own account and who are not themselves in actual possession of cotton.

(42) No economies in the cost of fuel and power appear possible in Bombay.

(43) A further reduction in the charge for water in Bombay is desirable.

(44) Managing agents should exercise the closest supervision over all purchases of stores.

(45) The only alternative to a reduction in wages in the Bombay mill industry is increased labour efficiency and it is in this direction that the true line of advance lies.

(46) The general adoption in Bombay of the system of maintaining a labour reserve to provide against absenteeism is desirable.

(47) The piecework system should be extended to spinners in Bombay and should be accompanied by an increase in the number of spindles allotted to each spinner.

(48) The disparity between the wages of spinners and weavers is a matter which demands the attention of the industry.

(49) An increase in the number of looms attended by a weaver would tend to economy and give increased earnings to the weaver even when accompanied by a slight reduction in rate.

(50) Economies similar to those suggested in the spinning and weaving departments can be effected in the preparatory departments.

(51) If the efficiency of operatives is to be improved, it is essential that there should be an improvement in the standard of efficiency of jobbers.

(52) Increased efficiency cannot be expected from operatives unless they are provided with suitable raw material. The existing tendency to spin higher counts of yarn than the quality of the cotton warrants causes breakages and increases the work of the spinner and the weaver.

(53) The fixation of a definite period of rest to enable operatives to take their morning meal is desirable.

(54) Labour should be recruited directly by the officer in charge of the department of the mill which requires it or by a responsible assistant and not by the jobber.

(55) The practice of compelling weavers to take over cloth spoilt by defective workmanship at its full value should be abolished.

(56) Fines levied should be used for the benefit of the operatives as a body.

(57) The standardisation of wages throughout the Bombay mill industry would undoubtedly strengthen the position of the industry. A suitable scheme could only be drawn up in consultation with the representatives of labour.

(58) Blocks of the chawls built by the Bombay Development Department might be taken over and administered by groups of mills or by the Bombay Millowners' Association as a body.

(59) The town duty of one rupee per bale should be reduced to eight annas per bale on all cotton consumed by the Bombay mills.

(60) More attention to welfare work on the part of the Bombay mill industry is desirable when financial conditions permit.

(61) Certain alterations in the courses in cotton textiles in the Victoria Jubilee Technical Institute are desirable.

(62) The provision of more facilities for technical education of mill operatives especially jobbers is essential to any improvement in efficiency. The early establishment of Trade Schools in Bombay is, therefore, desirable.

(63) The preparation and distribution of technical handbooks, in the vernacular, plentifully illustrated and drawn up on suitable lines, for the use of jobbers and operatives should be undertaken.

(64) The high labour costs in Bombay cannot be reduced by the introduction of the Northrop looms but the experiments with the Whittaker attachment should be continued.

(65) Bombay is not a suitable centre for the adoption of the double shift system since the city is already very congested and the presence of the additional labour force which would be required would increase this congestion.

(66) The desirability of imposing additional assessment on 'toka' lands in graduated stages when the present assessment expires should be considered.

(67) The Bombay Millowners' Association should consider the possibility of undertaking fire insurance for its members.

(68) No economies under the head of technical and supervising staff can be suggested but the proper training of such staff should be insisted on in all cases.

(69) Depreciation including any amount which may be in arrears, should invariably be regarded as a first charge on profits.

(70) Mill stocks should in all cases be checked at audit.

(71) The practice of employing an auditor who is related to the managing agent is open to objection and should be discontinued.

(72) The Bombay Millowners' Association should take immediate steps to obtain a full range of samples and to maintain a full record of prices of all imported cotton manufactures which compete with Indian goods.

(73) The Bombay Millowners' Association should constitute sub-committees to deal with questions relating to export and home markets, finance, labour, registration of labels and numbers, supply of raw material and woollen mills.

(74) Combined action should be taken by the Millowners' Associations and other bodies interested to ensure that the quality of cloth sold under a particular number is maintained.

(75) At least one member of each firm of managing agents should have received technical training.

(76) The practice of investing the surplus funds of mills with firms of shroffs is undesirable and should be discontinued as should that of lending the funds of one concern to another under the same managing agency.

(77) Writing down of capital in the Bombay mill industry is a matter which calls for further attention.

(78) Bombay should utilise to the full its natural advantages in the matter of climate and situation for the production of goods of higher counts than it has done in the past.

(79) The difficulties in regard to suitable raw material are not insurmountable, and can be overcome temporarily by greater use of American and African cotton.

(80) The charges levied for fumigation are a handicap to the use of American cotton.

(81) In a greater expansion in the Bombay mill production of bleached, coloured, dyed and printed goods lies one remedy for the depression in the industry in Bombay.

(82) There is no reason why the printing industry should not be successfully established in India, provided the operations are on a sufficiently large scale, and the latest developments in technique are utilised to the full. It is necessary, therefore, that the matter should be taken up by a combination of mills.

(83) A large factory for combined printing, bleaching and dyeing should be established in or near Bombay and there would seem to be great advantages for placing it at Ambernath.

(84) Greater attention to the quality of production is desirable.

(85) The practice of selling yarn under double numbers is undesirable, and should be discontinued.

(86) Both the system of sales on commission and that of selling through the mills' own shops have advantages and it is not possible, therefore, to say which is preferable.

(87) Representatives of mills should visit the consuming centres from time to time in order to acquaint themselves closely with the character of demand.

(88) The Bombay Millowners' Association should arrange for trade correspondents in the principal consuming centres.

(89) Managing agents should not act as guarantee brokers for the mills they control.

(90) It is desirable that the finance of the cotton industry should be investigated and that an enquiry into the possibility of introducing the warehouse system into India should form part of this investigation.

(91) The development of the export trade of Bombay would be a valuable means of relieving the depression.

(92) Coloured and dyed goods form the largest part of the exports of piecegoods and further expansion of this side of the Bombay industry would, therefore, strengthen its position in the foreign market.

(93) It is essential to the development of the export trade of Bombay that adequate information regarding foreign markets should be available and that the industry should be in a position to utilise it.

(94) The industry should examine the feasibility of a combination of the mills interested in the export trade for the purpose of arranging such details as manufacture of lines required, allocation of quantities among the members and prevention of imitation of marks and numbers.

(95) The statistical information regarding the industry should be improved in certain respects.

(96) High protective duties on the scale advocated by the Bombay and Ahmedabad Millowners' Associations cannot be justified.

(97) The claim for a protective duty of 4½ per cent. to enable the Indian mill industry to make provision for depreciation of plant and machinery cannot be admitted.

(98) No justification exists for a differential duty against Japan on the ground of depreciated exchange.

(99) The case for a small all-round increase in the import duty on cotton manufactures other than yarn is strengthened by the undoubted temporary handicap imposed on the industry by the stabilisation of the rupee at 1*s*. 6*d*.

(100) A moderate measure of protection both for yarn and cloth can be justified for such period as labour conditions in Japan continue inferior to those in India.

(101) An additional duty on yarn is undesirable in view of its effect on the handloom industry.

(102) A differential duty against Japan is undesirable.

(103) The proposal to give protection against unfair competition from Japan in the form of specific duties levied on the class of goods which are in the main imported from that country is open to several objections and cannot be supported. Protection to the present duty on all cotton manufactures other than yarn.

(104) No justification for an export duty on cotton can be established.

(105) The concession of free entry enjoyed by cotton mill machinery and mill stores prior to 1921 should be granted.

(106) The most satisfactory method of working the concession so far as stores are concerned would be to grant total exemption for stores which can only be used in the mill or handloom industries and to exempt other stores from duty if imported direct by a mill or to grant a refund on them when they are purchased from "stockists." Two lists have been drawn up accordingly.

(107) A stimulus to the production of goods of higher quality can best be given in the form of a bounty on the spinning of higher counts of yarn instead of by an additional import duty on yarn.

(108) A bounty of one anna per pound, or its equivalent on yarn of 32s and higher counts, based on the production of an average of 15 per cent. of the total working spindleage in a mill in British India would meet the situation.

(109) The operation of the bounty should be limited to four years.

(110) The bounty should be limited to the production of 15 per cent. of the spindleage in any mill and would not be given unless the total spindleage employed on higher counts exceeded 7½ per cent. and the average count spun was not below 34s.

(111) One great advantage of this scheme is that the position of the handloom industry will not be affected.

(112) As the majority of Indian mills have both spinning and weaving departments, the absence of protection for the lower counts of yarn is compensated by the additional all-round duty on cloth. Contingencies may arise in which an additional duty on yarn would be justified.

(113) If a satisfactory scheme for a combined bleaching, dyeing and printing plant can be put forward by the Bombay mill industry, assistance from Government should be given.

(114) No justification can be established for the grant of export bounties.

(115) Two Trade Commissioners should be appointed, one at Basra and one at Mombasa.

(116) Before Trade Commissioners are appointed for other countries, a rapid survey of the potentialities of the markets in those countries should be undertaken by a small mission.

(117) It is most important in the interests of the Bombay mill industry that it should have its own representatives in the principal export markets. Expenditure by the Bombay Millowners' Association in this respect should be supplemented for four years by the grant of an equal amount from Government up to a maximum of Rs. 25,000 annually.

(118) The question of subsidising shipping freights should be investigated by the Trade Commissioners and by the commercial mission suggested in (116). Combination on the part of the Bombay Millowners' Association would place it in a much stronger position to negotiate with shipping companies.

(119) The difficulties in applying a policy of discrimination in regard to railway freights to the cotton textile industry are insuperable.

(120) Specific complaints in regard to inequalities of railway freights are a matter for investigation by the Railway Rates Advisory Committee.

(121) The existing facilities in the matter of railway sidings in Ahmedabad are sufficient.

(122) The charges for the fumigation of American cotton entering India are levied in the interests of the cultivators of cotton and should be borne by general revenues.

(123) No case has been made out for the abolition of company super-tax.

(124) The cost of those proposals which involve expenditure should be met by an additional import duty of four per cent. on all cotton manufactures other than yarn.

(125) This duty should be imposed for a period of three years.

(126) No justification has been established for the special treatment of the hosiery industry.

(127) The abolition of the duty on yarn of counts above 40s or the grant of a rebate of the duty to mills using such yarn cannot be supported.

In conclusion, the majority of us wish to express our deep regret that we have been unable to obtain the President's support for our scheme of a bounty on the spinning of yarn of higher counts.

Abstracts from the President's Minute of Dissent.

I am not convinced that an artificial stimulus to the development of the spinning of higher counts is either necessary or desirable and I, therefore, object to the proposed bounty on principle and because I consider that the administrative difficulties in working the scheme satisfactorily are so great as to be insuperable.

* * * * *

No all-round increase in the duty affords any solution to the main problem before the Bombay industry, that of meeting the increasing competition of mills in other countries.

* * * * *

I therefore recommend the imposition of a differential duty of 4 per cent. on all cotton manufactures imported into India from Japan, to be imposed at the earliest date from which such a duty can be imposed with reference to the terms of the Anglo-Japanese Convention of 1905.

INDIAN WOMEN WORKING THE "CHARKA" OR SPINNING WHEEL.

P. S. Pattiwala.

Biographical Notes and Sketches.

Of the 195 biographical sketches published in these pages nearly 100 have been prepared from *The Indian Textile Journal* and *Men and Women of India*, the rest being compiled from information specially supplied. The notes are necessarily brief and contain the author's appreciation of the work and qualifications of citizens and officials, in reference especially to the textile and allied industries. The longer and detailed accounts will continue to appear in *The Indian Textile Journal* as hitherto.

N.B.—The page numbers at the end of each para refer to the portrait pages and the pages containing further references.

The Late

ADAM, SIR FRANK FORBES (Baronet).

Born in 1845 in Stirlingshire, he was educated in Scotland and in 1870 joined William Graham & Co., Manchester, as an assistant. In 1873 he came to Bombay to join W. & A. Graham & Co. and became head partner in 1883. Was Chairman of the Bombay Chamber of Commerce from 1883 to 1889 and member of the Legislative Council from 1884 up to his retirement in 1890. He was also a member of the Bombay Port Trust and Chairman of the Bank of Bombay. The guiding spirit of many philanthropic institutions in the city, and one of the principal workers for the establishment of the Victoria Jubilee Technical Institute. An ardent advocate of railway extension in India. Created a C.I.E. in 1888, Knighted in 1890 and received the Baronetcy of the United Kingdom in 1917. Was highly respected and loved by the people of this Presidency. Returning to England in 1890 he filled important public positions as President of the Manchester Chamber of Commerce, as Chairman of the Manchester Royal Infirmary Board and the Council of Manchester University, and of the Manchester and County Bank. He also took an active part on the Textile Committee and in the affairs of British Dyes Limited. Died in England in 1927.

ADENWALLA, SIR HORMASJI COWASJEE DINSHAW, Kt.

M.V.O., O.B.E.

Senior partner in the old-established house of Cowasjee Dinshaw & Brothers who have been well known in connection with the shipping trade between Aden and Bombay. Sir Hormasji is a highly esteemed member of the Parsi community and has contributed large sums for the industrial advancement of the Persian Zoroastrians. He has been connected as director with several joint stock cotton mills in Bombay and the mofussil and has rendered useful public services during the war period and on various other occasions which has been recognised by Government. He received the Knighthood in 1922 and the Victorian Order in 1912 and the Order of the British Empire in 1918. (P. 258.)

AGA, BURJOR S. JAMSHEDJI.

F.R.I.B.A., M.I. STRUCT. E., L.C.E., M.I.E.

Partner in the firm of Shapoorji N. Chandabhoy & Co., Chartered Architects and Engineers, since 1907. Mr. Aga has designed and carried out additions and alterations in the Bombay cotton mills as described on page 679. (P. 679.)

The Late

ALCOCK, ISACK.

A mechanical engineer who came out to Bombay early in 1863 at the Royal Mill now known as the Dinshaw Petit. Mr. Alcock worked with Mr. James Latimar as importer of cotton machinery. He also founded the firm of Alcock, Ashdown & Co., Ltd., with other promoters. Retired from India in May 1898, and died in Manchester in October of the same year.

ANNESLEY, FRANCIS CHARLES.

Born in 1879 and educated at Birkenhead School, Mr. Annesley gained experience of import and export trade in different firms in London and Liverpool and came out to Bombay in 1902 as assistant to James Mackintosh & Co. Joined Killick Nixon & Co. in 1906 and became partner in 1920. Is a member of the Bombay Port Trust, and director and chairman of the several railway companies and joint stock concerns under the agency of Killick Nixon & Co.

The Late

ASHBY, GEORGE.

Mr. George Ashby came to Bombay about the year 1884 as a supervisor for the erection of machinery on behalf of Platt Brothers & Co., Ltd., and then became assistant in the firm of Nowrosji Wadia & Sons, and was made a partner in 1906, and retired in 1912. Died in 1913.

The Late
BAHADHURJI, DR. K. N.
M.D. (LOND.).

A distinguished physician and surgeon who was the first Indian to obtain the degree of Doctor of Medicine, London, in 1884. Enjoyed a large practice in Bombay and was deputed by the Millowners' Association to represent their interests before the International Congress of Hygiene and Demotraphy that was held in London in 1801 under the Presidency of His Royal Highness the Prince of Wales (afterwards King Edward VII). Dr. Bahadhurji exposed the hollowness of Mr. Holt-Hallet's statement that the conditions in the Bombay mills were in an appalling state (*vide* page 473). The services rendered by Dr. Bahadhurji during the epidemic of plague in Bombay in 1897-98 and the hospital he started on his own account and the work he did gratuitously for the relief of the members of the Parsi community was of an exceptionally noble and self-sacrificing character and his death in August 1898 (suspected as from plague) was deeply mourned by all classes of inhabitants. (Pp. 473-474.)

The Late
BANAJEE, MUNCHERJEE NOWROJEE.

An active worker on the committee of the Millowners' Association from 1875 to 1890. Was intimately connected with the management of the New Great Eastern Mills which he improved considerably as secretary and managing director. Promoted and managed the City of Bombay Mills—one of the most successful of the local factories. He was also a director of the Victoria Steam Navigation Co., the East India Banking Co. and other mercantile concerns and joint stock companies. Was a member of the Factory Commission in 1884 and an active member of the Municipal Corporation since its establishment and a Fellow of the Bombay University. Born 1837; died 1890. (P. 248.)

BATLIVALA, DHUNJIBHOY F.

One of the factory trained mill managers who has risen to the position of a mill agent and machinery importer. Mr. Batlivala was apprenticed at the Petit Mills under the late Mr. N. N. Wadia, C.I.E., and served the Textile Mill as manager from 1901 to 1907. Was then appointed manager of the Crescent Mill, the Fazulbhoy Mill and the Pearl Mill till 1918 when the whole group of the Currimbhoy Mills in Bombay was placed in his charge in addition to the Indore-Malwa Mill. This was a recognition of Mr. Batlivala's practical knowledge of cotton machinery and his experience of mill management and was the first instance of an Indian manager being placed in full charge and responsibility—technical and general—of a group of mills comprising 300,000 spindles and 7,000 looms. In 1920 Mr. Batlivala became partner in the firm of Nowrosji Wadia & Sons, millowners and machinery agents. (P. 296.)

The Late
BATLIVALA, HORMASJI SORABJI.

Mr. Hormasji S. Batlivala was manager of the Colaba Land Mill for several years and till he projected the Jamshed Mill in 1884. While not a practical worker at the machines his knowledge and long experience of cotton mixings and the processes of manufacture of yarn and cloth helped him in working the Jamshed Mills profitably for several years. Also projected the Sorab Woollen Mills in Bombay. Died in 1905.

BELL, R. D.
C.I.E., M.A., B.SC., I.C.S.

Mr. Bell possesses educational and University attainments of a high order and has held important positions outside of the routine of the Indian Civil Service. Born in 1878 in Edinburgh he obtained his M.A. degree from the University in 1895 with first class honours in Mathematics and Natural Philosophy. Took further course of studies for two years in science, history, political economy and political science. Passed the I.C.S. examination in 1901, being third on the combined list and second for India. Graduated B.Sc. at Edinburgh. Coming out to India in 1902 he was posted to the Nasik district. Placed on special duty in 1904 in connection with a plague of locusts and subsequently superintended the revision of the Statistical Atlas of the Bombay Presidency. In 1905 appointed Assistant Collector, Khandesh district, with headquarters at Bhusaval. Came to Bombay in 1909 as Under-Secretary in the Revenue and Finance Department. Was appointed Assistant Settlement Officer in the Poona district in 1914 and acted for a short time as Settlement Commissioner and Director of Land Records. Was appointed Secretary of the Indian Industrial Commission in 1916, and toured India with Sir Thomas Holland and studied first hand the conditions of the trades and industries and the habits and requirements of the people engaged in industrial and commercial pursuits. Joined the Munitions Board in 1917 as Controller of Industrial Intelligence and became Controller of Oils and Paints in 1918. The experience thus gained entitled him to fill in 1919 the responsible post of Director of Industries and Controller of Munitions in Bombay. Has been Chairman of the Victoria Jubilee Technical Institute and of the Committee of Direction for Technical and Industrial Education since 1921; is a member of the Advisory Committee of the Institute of Science, Bombay. Has been a Trustee of the

Prince of Wales Museum, Chairman of the Smoke Nuisance Commission and member of the Advisory Committee of the College of Engineering, Poona. Has served on various committees dealing with technical and industrial education, industries, agriculture and co-operation. Was Chairman of the Organising Committee in Bombay for the British Empire Exhibition. Since 1924 Mr. Bell has been Secretary to Government in the Development Department and Commissioner, Bombay Suburban Division. He was made a C.I.E. in 1919. In 1924 he was appointed an official member of the Imperial Legislative Assembly. (P. 688.)

The Late
BENGALEE, SORABJI SHAPURJI, C.I.E.

Born in Bombay in 1831. Joined the firm of W. & A. Graham & Co. in 1864 as Guarantee Broker in partnership with Vurjeevandas Madhawdas. Was a journalist and wrote for several Gujarati papers and visited England in 1863. Was a member of the Legislative Council in 1876. Advocated the introduction of the Factories Act for children in 1881. Appointed Sheriff of Bombay in 1881 and Companion of the Indian Empire in 1882. Staunch advocate of female education and contributed Rs. 50,000 for building a school for girls. Was a member of the Factory Commission in 1884-85 and also in 1890, and a Fellow of the Bombay University. Director of cotton mill companies and chairman of the Colaba Land Mills. Died 1893. (P. 17.)

BHAROOCHA, SOHRAB FRAMJEE.
F.R.I.B.A.

Mr. Bharoocha is a partner in the firm of Taraporvala Bharoocha & Co., Architects Civil Engineers and Surveyors. Studied drawing and technological subjects at the V. J. T. Institute and passed the London City and Guilds examination with credit. Passed the London Chamber of Commerce and other examinations in Accountancy; for Architecture, he was articled to Mr. S. N. Chandabhoy in 1899, and took up the course for S.A. and R.I.B.A. Became partner in the firm of Shapoorji N. Chandabhoy & Co., in 1904, and then started his firm in 1915 which is now known as Taraporvala Bharoocha & Co. In addition to artistic and important buildings he has designed and supervised the construction and extensions of cotton mills including the Sassoon Mill, the New City of Bombay, the New Great Eastern, the Jubilee, the Gold Mohur, the Victoria and other mills. He is a Fellow of the Royal Society of Arts and Society of Science; a Fellow of the Society of Architects (Lond.) and a Fellow of the Royal Institute of British Architects (Lond.) and is now elected President of the Bombay Architectural Association. (P. 689.)

BHARUCHA, FAKIRJEE EDULJEE.
L.M.E., M.I. MECH. E., M.I.E.

Late Director of Industries, Bombay Presidency, being the first Indian to hold the post. Joined the V. J. T. Institute in 1889 and was one of the first batch of students to pass out with honours in L.M.E. Since then Mr. Bharucha served Tata Sons & Co., the New Mofussil Co., the Rajnagar Mill and the Amritsar Cotton Mill. He also designed and built the Lahore Spinning and Weaving Mill and worked as its manager and engineer for three years after which he was placed in charge of Rai Bahadur Mela Ram's Mill in the same city. Started business as machinery agent and consulting engineer in 1904 and designed and built several factories including cotton mills, oil and flour mills, iron works, ice factories, cotton presses and ginneries. In 1909 Mr. Bharucha was appointed Assistant Professor of mechanical engineering in the College of Engineering, Poona, and in addition to the lectures he designed a laboratory and workshop for students for the degrees of Bachelors of Civil and Mechanical Engineering which is the first and the largest of its kind in India, and for which he received the appreciation of Government. After serving the College for nine years as Assistant Professor and for one year as Senior Professor he was appointed Executive Engineer in charge of the Central Stores and Workshops, P.W.D., at Dapuri, near Poona, and in 1919 became Assistant Director of Industries and in 1925 when it was decided to reorganise this department he was appointed Director. In this capacity he had to report on new industrial problems and give technical assistance and advice to the factory owners, and help the cottage industries especially hand loom weaving, dyeing, calico-printing and to supply information regarding the imports and exports and articles manufactured in the country. The extensive experience of Mr. Bharucha as an engineer and consulting expert proved of considerable value to Government and the public. He is also the author of several publications on mechanical and electrical engineering, oil and gas engines, motive power and building construction etc. Has read instructive papers before the Bombay Engineering Congress and other learned societies and is a member of the Institution of Mechanical Engineers (London) and the Institution of Engineers (India). Mr. Bharucha has lately retired from Government service and is now in private practice as a Consulting Engineer. (P. 581.)

BILLIMORIA, SHAPURJI D.

Mr. Billimoria ranks among the mill overlookers who have made their way and risen to an independent position in the mill industry in connection with dyeing, bleaching and finishing. Beginning life as a

sizing and weaving master he became an apprentice in the laboratory of Leopold Cassella & Co. which was conducted under the supervision of Mr. Goll. The scientific and practical knowledge of dyeing and bleaching which Mr. Billimoria thus obtained enabled him to act as an expert for millowners and in time he succeeded in securing contracts for the dyeing, bleaching and finishing of the yarns and fabrics of large cotton mills, and has also erected dyeing and bleaching plants in the mill districts. (P. 672.)

BILLIMORIA, SHAPURJI BOMANJEE.
M.B.E.

One of the best known of Indian auditors and accountants in the Presidency. Born in 1877 he passed the senior Accountancy Examination of the London Chamber of Commerce with distinction in 1899. Is also a Fellow of several Societies in Great Britain connected with auditing and accountancy. Conducted the Commercial Training Institute in Bombay and arranged for the examination of Indian students in accountancy by the London Chamber of Commerce and other bodies. Founder of the Society of Professional Auditors, Bombay, and its Secretary for many years. Commenced practice as a Public Accountant in 1901 and made his mark as a careful and conscientious worker in complicated and important matters which were entrusted to him by the High Court in connection with banking and financial concerns. Senior partner in the firm of S. B. Billimoria & Co., who have the audit work of 25 cotton mill companies in Bombay with a capital aggregating Rs. 12,15,00,000 in addition to other mill companies in the Bombay Presidency and joint stock concerns, insurance concerns, and banking institutions like the Imperial Bank of India, the Central Bank of India and the Bank of India and a large number of private firms. Appointed Official Liquidator of several of the banking and financing institutions which came to grief during the critical period of 1913 and of the hostile firms on the outbreak of war in 1914-15, including the affairs of the Austrian Lloyd Steam Navigation Company. Has been a member of the Auditors' Council, Bombay, and Honorary Auditor of the Imperial Indian Relief Fund, the War Hospitals and other charitable institutions and organisations. Was appointed M.B.E. in 1919 and received the Certificate of Merit from H. E. The Viceroy for his work in connection with the War Loan of 1918. Is Vice-President of the Indian Merchants' Chamber and was appointed a member of the Government of India Back Bay Enquiry Committee in 1926-27 and is also a member of the Improvement Trust Committee for the city of Bombay. (P. 284.)

BIRKETT, SIR THOMAS, Kt.

Came to Bombay in 1800 as an assistant in the firm of Killick Nixon & Co. and took an active part in its business affairs and became a partner in 1907. His public services included charity work, famine relief operations, help to the wounded soldiers who were brought into Bombay during the war, and the work he did in connection with the war loan which was subscribed to the extent of over Rs. 10½ crores in this Presidency, with Sir Thomas as Chairman of the Organising Committee. As a member of the Bombay Chamber of Commerce and of the Legislative Council of the Government of Bombay he brought to bear his extensive business experience and knowledge to useful purpose, while the charitable institutions and hospitals of the city benefited materially by his sympathies and active co-operation. In recognition of these services he was appointed Sheriff of Bombay in 1917, the honour of Knighthood being bestowed upon him in 1918.

The Late
BLANEY, DR. THOMAS, C.I.E.

One of the best known of medical practitioners and an ardent worker in the cause of Municipal Government in Bombay. A warm advocate for the improvement and welfare of factory workers. Dr. Blaney took a leading part in the investigations of the Factory Commission appointed in 1875 and was the only member (besides the President) who voted in favour of a Factory Act. (Pp. 473-474.)

BOLE, SITARAM KESHAV.
M.L.C.

An active worker in the cause of the labouring classes and the cotton mill operatives in particular. One of the founders of the Kamgar Hitwardhak Sabha and joint Vice-President of the Bombay Textile Labour Union. Has represented the labouring classes on the Bombay Legislative Council since 1924 as a Government nominee. Took Mr. Ramsay MacDonald, M.P., among the Bombay mill workers in 1910 and organised the Millhands Conference in 1919. (Pp. 485 to 488.)

BOMANJEE ADERJEE.

One of the oldest of engineers in Bombay with practical knowledge of the erection and working of the largest cotton mill engines. Mr. Bomanji had received a thorough workshop training before he was appointed assistant engineer at the Bomanji Petit Mill in 1889. Later on he became chief engineer at the Manekji Petit Mill and in 1895 when the Textile Mill was started he

was appointed engineer in charge and also acted in the same capacity at the Century Mill and the Spring Mill during their construction and working. Mr. Bomanji had served under Mr. N. N. Wadia, C.I.E., till the latter's death in 1899 and also worked under his sons and his practical experience of the construction of mill buildings and the erection and working of engines and mill machinery in general entitled him to hold the post of manager of the Spring Mill in 1910. His services and qualifications were further appreciated by Messrs. Nowrosji Wadia & Sons and he was engaged as an assistant in the firm in 1916 and admitted a partner in 1920. From a mill mechanic to a member in one of the largest firms of technically trained mill agents and machinery importers is a creditable record of which any citizen would be justly proud. (P. 296.)

The Late
BROACHA, SIR SHAPURJI BURJORJI, Kt.

Sir Shapurji Broacha was instrumental in financing large industrial undertakings and public utility concerns and was the trusted broker and adviser of important Native States. Was agent and director of the Phœnix Mills and projected and financed the Sir Shapurji Broacha Mills. Had been director on the Board of several other joint stock companies, banks and public utility concerns. Was one of the principal promoters of the Native Share and Stock Brokers' Association and its active member and also President for 20 years. Sir Shapurji was universally esteemed for his benevolence and kindly nature. Born of poor parents and without any university qualifications he made his way in life by hard work and a regard for the poor and the needy which increased with the increase of his wealth and influence. Left a large fortune at his death which took place on June 1920, a substantial portion of his wealth having already been given in charity. (P. 252.)

The Late
BRADBURY, J. F.

Coming out to Bombay in 1882 as an assistant at the Queen Mill, Mr. Bradbury became prominent as a mill manager, mill agent and machinery importer. As manager of the Lakshmidas Mill for over ten years he acquired considerable reputation on account of the profitable working of the concern whose yarn fetched the highest price in the China market. His advice was frequently sought by the millowners and agents in Bombay and Ahmedabad and in 1895 he started the firm of Bradbury Brady & Co. in partnership with Mr. W. H. Brady as mentioned on page 651. Mr. Bradbury also took a active part in the deliberations of the Millowners' Association of which he was elected President in 1913. His practical knowledge and experience proved of great value in improving the working of the cotton mills for which he acted as consulting manager. Died in 1916. (P. 219.)

BRADY, W. H.

Senior partner in the firm of W. H. Brady & Co., Ltd., till 1920. Came to Bombay in 1890 as manager of the David Mills which made rapid progress under his supervision and ranked amongst the prosperous cotton mills in the city. In 1895 he started the firm of Bradbury Brady & Co. in partnership with Mr. J. F. Bradbury as machinery agents and importers and as mill agents from 1901. Mr. Brady, however, retired from the firm in 1912 retaining the machinery agencies and starting the business under the style of W. H. Brady & Co. in partnership with Mr. Joseph Kay (now Sir Joseph Kay), Mr. H. Lakin and Mr. Wm. Johnson and the business flourished, *vide* page 651. Mr. Brady retired from India in 1919 having the satisfaction of rising from a mill manager to the rank of the most successful of mill agents and machinery importers in the country. (P. 218.)

BURLEY, GEORGE WILLIAM.

B.SC. (LON.), WH. EX., M.I. MECH. E., M.I.E. (INDIA), MEM. A.S.M.E.

Professor of Mechanical Engineering, Victoria Jubilee Technical Institute, Bombay, since 1921 and acted as Principal in 1926 and has been selected Examiner in Engineering for the Bombay University since 1925. Born in Sheffield in 1885; received technical education at the Sheffield University College 1900-05. Was apprenticed in the Electricity Department, Sheffield Corporation, 1899-1903. Became Assistant Engineer, Yorkshire Electric Power Co., 1905-06, and Research Student, Engineering Department, Sheffield University, 1906-07 and also lecturer in Mechanical Engineering in 1907-21. Became Manager of the Munition Works at the same University from 1914-18. Appointed Technical Manager, Guy Motors, Ltd., Wolverhampton, for six months in 1918 and also acted as Lecturer in Electrical Engineering at the Wolverhampton Technical School. Organised and conducted researches in the engineering and machine tool laboratories of the Sheffield University from 1907 to 1921. Has contributed articles to the Engineering Press of England, America and India since 1905 and has read papers on "English and American Lathe Design" before the Sheffield Society of Engineers and Metallurgists in 1908, on "Cutting Power of Lathe Turning Tools" (jointly with Dr. W. Ripper) before the Institution of Mechanical Engineers in 1913 and 1919, "Bibliography of Cutting Tools" before the same Institution in 1920. Has been the author of "Lathes: Their Construction and Opera-

tion," 1914; "The Testing of Machine Tools," 1915; "Machine and Fitting Shop Practice," 1918; "Principles and Practice of Toothed Gear Wheel Cutting," 1921. (P. 570.)

The Late

BYRAMJEE JEEJEEBHOY (NANABHOY).

A prominent citizen of Bombay who rendered useful services in various directions between 1870 and 1885. Born in 1841 and educated in Bombay Mr. Nanabhoy Byramjee joined his father's firm which acted as brokers to British houses in the city. On the death of his father he assumed the name of Byramjee Jeejeebhoy. Took an active part in the civic life of Bombay as a member of the Town Council and Municipal Corporation. Was a Fellow of the Bombay University and a Director of the Government Savings Bank. Was a member of the Factory Commission in 1884 and member of the Chamber of Commerce and the Millowners' Association. Was a director of the Colaba Land Mill, the Nadiad Mill, the Apollo Press Co., the Alliance Mill, the New Berar Co., the Anglo-Indian Mill, the New Great Eastern Mill, the Bombay Fire Insurance Co. and other joint stock concerns. Promoted the Ripon Manufacturing Co. in 1883 and acted as its agent and director. Retired from active life in 1887 and died in 1914. (P. 246.)

BYRAMJEE JEEJEEBHOY.

Son of Mr. Rustomjee Byramjee Jeejeebhoy he assumed the family name of Byramjee Jeejeebhoy on the death of his father in 1922. Born in 1881 he was educated at St. Xavier's College. Has been a prominent member of the Municipal Corporation and Chairman of the Standing Committee for 1924-25. Is a director of nearly 10 cotton mill companies (*vide* page 256) and a member of the Millowners' Association. Was appointed Sheriff of Bombay for 1927. (P. 264.)

The Late

CAMA, KHURSEDJI RUSTOMJI.

A well-known social reformer and educationist. Traded largely with China and the British Ports. Went to Pekin in 1851 and to Liverpool and London in 1854 and opened the first Indian Agency House with these centres in partnership with Mr. Dadabhoy Navroji. Visited the Continent in 1858 and studied eleven languages including French and German. Elected a Fellow of the Bombay University in 1866. Acted as secretary of the Colaba Land and Mill Co. from 1873 to 1901. Born in 1831; died in 1909. (P. 244.)

CAMDIN, SHIAVUXA SORABJI DUSTUR.

The oldest weaving master still in charge of a loom shed, and one of the most accomplished designers of fancy cloth and fabrics. Mr. Camdin began his apprenticeship so far back as in 1874 at the Alexandra Mill and at the Alfred Mill in Broach and has since served at nearly a dozen cotton mills in Bombay and up-country being at one time in charge of the loom shed of the Central Jail at Buxar. In Bombay, however, he served the Oriental Mills at Tardeo and Colaba for 7 years, the Dinshaw Petit Mill for 10 years and the Manekji Petit Mill for 2½ years. These three concerns had large weaving sheds and the different varieties of cloth produced by them found a ready sale. Mr. Camdin's reputation and extended experience were availed of by the Agents of the Crown Mill who engaged his services in 1914 and he is still in charge of the weaving shed of this concern which ranks among the prosperous of the Bombay mills, the profits even in depressed times being exceptionally good. Mr. Camdin has been fully worthy of the respect and confidence of the mill owners which he has enjoyed during his career of 50 years. (P. 296.)

The Late

CASSUMBHOY DHARAMSEY.

A very enterprizing and prosperous merchant who travelled over Europe and other places in 1870-72 and helped his father Mr. Dharamsey Poonjabhoy in the management of the Dharamsey Mill at Coorla. Born 1834; died 1882. (P. 11.)

The Late

CHANDABHOY, NUSSERWANJI.

C.E.

The pioneer civil engineer and architect in Bombay who designed and built several of the early cotton mills in the city, *vide* page 677. (P. 678.)

CHANDABHOY, MUNCHERSHAH N.

F.R.I.B.A., M.S.E. (LOND.)

Senior partner in the firm of Munchershah N. Chandabhoy & Co., Architects and Civil Engineers, and the oldest practising member of the profession in Bombay. Worked with his father Mr. Nusserwanji Chandabhoy, C.E., from 1880 to 1884 and then started business with his brother Mr. Shapoorji N. Chandabhoy and designed several cotton mills. (Pp. 677, 678.)

The Late

CHANDABHOY, SHAPOORJI N.

F.R.I.B.A.

Eldest son of Mr. Nusserwanji Chandabhoy and partner in his father's firm. Also partner latterly in the firm of "Shapoorji and Munchershaw N. Chandabhoy" who designed and built the cotton mills mentioned on page 677. In 1900 Mr. Shapoorji Chandabhoy started business in his own name and in 1907 as Shapoorji N. Chandabhoy & Co., who were entrusted with the designing of cotton mills and their extensions as stated on page 679. Mr. Shapoorji died in 1920 after which the business has been carried on by the surviving partner Mr. Burjor S. Jamshedji Aga. (P. 679.)

CHOWNA, PALONJI D.

A.M.I.M.E.

Joint founder of the firm of Drewet Chowna & Co., and a practical hydraulic engineer of long standing. One of the enterprising Indians who has risen from the rank of a mechanical engineer to the position of an independent machinery agent and importer. Mr. Chowna is well known in the cotton pressing industry and represents old and reputed firms including Duncan Stewart & Co. of Glasgow.

The Late

COTTON, SIR GEORGE, Kt.

Born and educated in Manchester and after practical training in textile factories he came to India in 1860 as Agent to the East India Cotton Agency Co. and the Mofussil Co. at Julgaum. Started the firm of Greaves Cotton & Co. in 1868 in partnership with Mr. James Greaves, and also projected the Alfred Mills and the Albert Edward Mills at Broach and the Empress, Leopold, James Greaves, Connaught, Howard and Bullough, New Empress and the Imperial Mills in Bombay. Took a very active part in the civic and commercial life of Bombay as member of the Municipal Corporation, the Chamber of Commerce, the Millowners' Association, the V.J.T. Institute and other public institutions and industrial concerns. Born in 1842; died in 1905. (Pp. 15, 643, 644.)

The Late

CURSONDAS VALLABHDAS.

Was Managing Agent of the Jivraj Baloo Mill from 1878 till his death in 1897. Few millowners and agents possessed the knowledge of mill management as Mr. Cursondas did. He could make calculations of the counts, etc., and give instructions for the manufacture of cloth to the weaving masters. The Jivraj Baloo Mill worked successfully under his management.

CURRIMBHOY, SIR FAZULBHOY, Kt.

The most prominent member of the Khoja community as a millowner, merchant and a useful and progressive citizen. Has done valuable and constructive work in the commercial and industrial life of Bombay. Born in 1875, he took an active part in the affairs of the Municipal Corporation for over 20 years being elected its President for the year 1914-15, and Chairman of the Standing Committee for 1910-11. Served on various Commissions and Committees including the Weights and Measures Committee, Committee on the Education of Factory Employees, Commission for Life-Saving Appliances; was a member of the Prince of Wales Museum of Western India and Hon. Secretary Bombay Presidency War Relief Fund, 1917. Member of the Bombay Provincial Council and the Imperial Legislative Council; member of the Local Board of the Imperial Bank of India; Chairman of the Millowners' Association, 1907, and one of its most active members; Chairman of the Indian Merchants' Chamber for 1914, and founder of the All-India Commercial Congress. A Government nominee on the Board of the V.J.T. Institute. A staunch advocate of education and member of the most important educational institutions for Mahomedans including the Aligarh College and All-India Moslem League, and the Moslem University Foundation Association. Appointed Sheriff of Bombay for 1926 and was one of the three delegates invited by the Government of India for the International Financial Conference convened by the League of Nations at Brussels in 1920. Has taken an active part in the financing and launching of important projects including the Tata Iron and Steel Company, the Tata Hydro-Electric Company and has been the principal organiser and worker of the numerous spinning and weaving factories and industrial concerns under the Agency of Sir Currimbhoy Ebrahim & Sons, Ltd., of which he is Managing Director. (P. 161.)

The Late

CURRIMBHOY, RAHIMTULLA, HON.

M.L.A.

One of the brightest members of the Khoja community and of the Indian communities at large. Displayed marked abilities as Chairman of the Bombay Millowners' Association whose interests he also represented on the Indian Legislative Assembly. Few wealthy Indians, at such an early age, had so ably and whole-heartedly devoted their time and put in harder work in the interests of the people than Mr. Rahimtulla Currimbhoy. Died in 1921. (P. 168.)

DADABHOY, HON. SIR MANECKJI B.

K.C.I.E., BAR-AT-LAW.

Sir Maneckji Dadabhoy is one of the few Indians who have gained equally prominent positions in the professions, in politics and in commercial and industrial undertakings. Born in Bombay in 1865 and after passing his matriculation examination, he went to England to read for the Bar and passed out of the Middle Temple in 1887, distinguishing himself by reading several instructive papers before the East India Association. Practised at the High Court in Bombay on his return and took an interest in the civic affairs of the city as a member of the Municipal Corporation. Went to Nagpur in 1890 where he made his mark as a lawyer and was appointed Government Advocate in 1891. Published commentaries on the "Land Laws and Tenancy Acts of the Central Provinces." Has interested himself in the development of the indigenous resources of the country and her trades and industries. Was President of the Industrial Conference held at Raipur in 1907 and the All-India Industrial Conference held in Calcutta in 1911. Member of the Imperial Legislative Council from 1908 to 1911 and 1914 to 1917 and of the Council of State since 1921. Has been a governor of the Imperial Bank of India and a member of the Indian Fiscal Commission and the Royal Commission on Indian Currency and Exchange. Is managing director of the Nagpur Electric Light and Power Co., the Berar Manufacturing Co., and the Model Mills, Nagpur. His influence has also been far-reaching as proprietor of the Ballarpur, Sasti, Ghugus, and the Pisgaon-Raipur Collieries and numerous manganese mines and ginning and pressing factories. Was made a C.I.E. in 1911, received the Knighthood in 1921 and created a K.C.I.E. in 1925. (P. 258.)

The Late
DADABHOY, RATANSHAW.

A.M.I.C.E.

Came into prominence among the millowners in 1890 as an energetic machinery agent. Entered as an assistant in the "Bombay Foundry and Iron Works" in 1880 and was made a partner in 1884 by Mr. Shapurji Sorabji who was then proprietor of the concern. Mr. Ratanshaw Dadabhoy co-operated actively with the latter in extending the business of Sorabji Shapurji & Co. among millowners when the firm took up the importation of cotton machinery on the return of Mr. Shapurji Sorabji from Europe in 1887. Mr. Dadabhoy travelled in Europe and America on behalf of his firm and arranged for the agency of John Musgrave & Sons, Bolton, and was instrumental in securing large orders for the latter and for Brooks & Doxey and Elijah Ashworth. Was joint promoter of the Globe Mills Co., Ltd., with the late Sir Harkisondas Narrotumdas and Mr. Shapurji Sorabji, in 1896, and continued as a partner in the Agency business of the mill, till his death in 1905. (P. 649.)

DADINA, H. M.

Mr. Dadina was trained at the works of Lancashire machinery makers and manufacturers and represented Messrs. Dobson & Barlow, Ltd., for many years from 1890 under the style of St. Paul and Dadina. Has been an energetic worker in the machinery business and well known among managers and engineers.

The Late
DAMODAR THACKERSEY MOOLJI.

A highly respected member of the Hindu community and one of the leading millowners of his time. A prominent Municipal Councillor, and President of the Native Piece-goods Merchants' Association. Was senior partner in the firm of Thackersey Mooji & Co., who were guarantee brokers to Gaddum Bythel & Co. Projected the Hindustan Mill, the Western India Mill, the Indian Mfg. Co., and purchased the Hongkong Mills. Was a member of the Bombay Presidency Association and of the National Association and of the Bombay Branch of the Royal Asiatic Society. Was Chairman of the Indian Fire Insurance Co., Ltd., and several other joint stock concerns besides the mill companies under his firm's agency. Gave large sums in charity and towards the education of young Indians in this Presidency. Made a strong protest against the practice of stamping false measurements on Indian piecegoods and his efforts resulted in the passing of the Indian Merchandise Marks Act of 1889 which makes the offence punishable. Born in 1847. Died 1893. (P. 125.)

The Late
DAMODERDAS TAPIDAS.

Son of Mr. Tapidas Varajdas who was one of the pioneers in the Hindu community to start cotton spinning and weaving factories. Mr. Damoderdas's business aptitude was appreciated by the commercial communities in Bombay and he was chairman and director of several joint stock companies including the Alliance Mill, the Colaba Land Mill, the Sassoon and Alliance Silk Mill, the Southern India Mill and a large number of ginning and pressing factories. He had also a proprietory interest in the Saraswati Mill and the Tapti Mill. A generous-hearted man he gave large sums in charity and built temples and *dharmasalas* at Nasik, Sidhpur, Muttra, Dumas, Ajeera and other places. Born in 1854; died in 1899.

The Late

DAVID, SIR SASSOON, Bart., K.C.S.I.

The most progressive and enterprising member of the Jewish community in Bombay. As a self-made man he contributed materially towards the development of the trades and industries of this Presidency. Was an active worker as a member of the Municipal Corporation for over 20 years and its President for 1921-22. Promoter of the Bank of India and other industrial and public utility concerns; on the Board of which he acted as Director or Chairman. Chairman of the Millowners' Association for 1905; member of the Improvement Trust; member of the Bombay Legislative Council and the Council of the Governor-General of India. Knighted in 1905 and received the K.C.S.I. in 1922 and Baronetcy in 1911. Born 1849; died 1926. (P. 270.)

The Late

DAVER, CAWOSJI NANABHOY.

The pioneer of the textile industry in India, having projected the first cotton mill, *viz.*, the Bombay Spinning Mill which was started in 1855 at Tardeo, Bombay. He also financed and projected the Bombay Throstle Mill and several banking and financial concerns. Born in 1814; died in 1873. (P. 11.)

DAWSON, T. S.

M. I. MECH. E.

Principal, V. J. T. Institute from 1907 to 1920. Served Hayward Tyler & Co., London, for 7 years as apprentice and afterwards as their leading draftsman. Studied at South Konsington and gained nine certificates. Qualified himself as teacher in machine design, steam and theoretical mechanics. Joined Hick Hargreaves & Co. in 1887 in hydraulic and millwork. Again went to Hayward Tyler & Co. in 1890 as chief draftsman and engineer in the designing and estimating departments. Conducted Technical Classes from 1890-94. Went to Pontifax and Wood as manager of their works in distillation, ice-making and refrigerating plants. Gained further experience in research works in internal combustion engines, distillation, liquefaction of gases, recovery of salt by refrigeration and electric driving of workshops. Retired from the V. J. T. Institute in 1920 and from India in 1926. (P. 570.)

The Late

DHARAMSEY POONJABHOY.

The first member of the Khoja community and one of the pioneers among the Bombay citizens to embark on cotton spinning and weaving. Mr. Dharamsey purchased the Coorla Mills in 1865 and called it the Dharamsey Poonjabhoy Mills. He was one of the most enterprising merchants of his time and traded largely in cotton and other commodities. Took his son Mr. Cassumbhoy into the import and export business and the latter extended it considerably and the firm of Dharamsey Poonjabhoy & Co. grew to be one of the wealthiest of the Indian firms of the period. Mr. Cassumbhoy was sent to England to select the machinery for the new Dharamsey Mill which was extended to 90,000 spindles and 1,000 looms and became the largest in India in 1872. The difficulties of the labour supply and other circumstances came in the way of Mr. Dharamsey and he had to sell the concern under liquidation as stated on page 27. Born in 1816, died in 1888. (P. 11.)

The Late

DHARAMSEY SUNDERDAS.

Senior partner in the firm of Moolji Jaitha & Co. in 1889 and a prominent millowner of his time. Was a member of the Chamber of Commerce and the Millowners' Association and Agent of the Soonderdas Mill, the Jalgaum Mill and the Madras United Mill and several ginning and pressing factories. He was also the Trustee of the Moolji Jaitha Cloth Market and a highly respected member of the Bhathia community. By his untimely death in 1899, at the early age of 34, the commercial communities in Bombay lost an intelligent and progressive citizen who had gained the regard of merchants and dealers for his courteous disposition and generosity.

DICKINSON, ALFRED.

M.I.C.E., M.I.E.E., M.I.M.E.

An experienced consulting engineer and senior member of the firm of Alfred Dickinson & Co., London and Birmingham. Mr. Dickinson's services were engaged in 1908 for the general designing and construction of the Tata Hydro-Electric Works at Lonavla and his long experience of large engineering works proved of considerable value to Messrs. Tata. (Pp. 559 to 565.)

DINSHAW, F. E.

One of the best known of lawyers in Bombay and partner in the firm of Payne & Co., Solicitors. Mr. Dinshaw has been intimately associated with the mill industry as a financier and director having also an interest in the Agencies of several mill companies. He is Director in 30 of the cotton mills in Bombay aggregating a total of Rs. 12,81,55,000 in paid-up capital, a position not occupied by any other cotton mill director in the whole of India. (See page 261.)

DOVEY, A. G.

Born in 1879 Mr. Dovey has been connected with the firm of David Sassoon & Co., Ltd., ever since he entered business life. After acting for many years as manager of the branches at Karachi, Bombay and Calcutta he was appointed the firm's chief representative at the Shanghai office in 1919. (P. 213.)

The Late
DUNKERLEY, J. H.

Manager for 20 years (1877-1897) of the group of seven spinning mills under the agency of Greaves Cotton & Co. As an expert in ring spinning his advice was sought by other millowners and in 1898 he started business as a consulting expert and machinery agent which he carried on till his death in 1920. (P. 33.)

The Late
EBRAHIM, SIR CURRIMBHOY
(First Baronet).

The leading member of the Mahomedan community in India as a millowner, merchant, financier and public benefactor. From the position of a small trader he ranked among the largest millowners and the wealthiest among the merchants of his community. Carried on an extensive trade in opium, yarn, cotton, silk and other commodities between India and the East. Took a leading part in the development of the textile industry in Bombay, the several spinning and weaving mills under his firm's Agency representing a paid-up capital aggregating nearly Rs. 3 crores. Contributed over Rs. 5,00,000 for educational and other public purposes in addition to extensive private charity. Born 1840; died 1924. (P. 157.)

EBRAHIM, SIR CURRIMBHOY
(Second Baronet).

Mahomedbhoy Currimbhoy Ebrahim, born in 1867, is the eldest son of Sir Currimbhoy Ebrahim, Bart., and succeeded to the title on the death of his father in 1924. A useful member of the Khoja community and director of the several mills under the Agency of Sir Currimbhoy Ebrahim & Sons, Ltd. Member of the Municipal Corporation, the Advisory Committee of the Department of Industries and the Industrial Disputes Committee. Director of the Bank of India and other industrial and public utility concerns. Appointed Sheriff of Bombay in 1922. Received the Kaiser-i-Hind Gold Medal in 1921 and Knighthood in 1924. (P. 160.)

FERNANDEZ, V. A.
L.T.M.

One of the most successful of students of the V. J. T. Institute and now head of the Textile Department. Mr. Fernandez was among the first batch of students who joined the Institute from its very first session in 1889. He passed out as an L.T.M. in 1891 and was engaged as an assistant in the Ripon Textile School attached to the Institute till 1897 after 6 years' service in a cotton mill. On the resignation of Mr. Pomfrel, the head of the Textile Department in 1919, Mr. Fernandez was appointed in his place and he is the first and the only student of the V. J. T. Institute who has been given such a responsible post in the Textile Department. (P. 581.)

FERGUSON, ALEXANDER FLETCHER.

Auditor and Accountant and founder of the firm of A. F. Ferguson & Co., Chartered Accountants. (Pp. 282, 283.)

FROOM, HON. SIR ARTHUR, Kt.

Intimately connected with the shipping industry in Bombay since 1895, and a partner in the firm of Mackinnon Mackenzie & Co. since 1916. Born in 1873 and educated at St. Paul's School. Entered the service of the P. & O. S. N. Co. in 1890 and acted as Superintendent in Bombay from 1912 to 1916. Trustee of the Port of Bombay from 1912 to 1924 and Chairman of the Chamber of Commerce for 1920. Member of the Indian Mercantile Marine Committee, India, and of the Reforms Enquiry Committee, India, for 1924; also acted on the Central Advisory Committee, Railways, India, and has been a member of the Council of State, India, since 1921. (P. 689.)

The Late
GAJJAR, T. K.
M.A., B.SC., F.C.S.

A highly skilled industrial chemist and founder of the Techno-Chemical Laboratory in Bombay in 1899. The Institute proved a great success and in 1907 it was recognised by the Senate of the Bombay University for sending up students for the M.A. Examination in Chemistry. Died in 1920.

The Late
GAMADIA, NOWROJI JEHANGIR.

Mr. Gamadia had been actively associated with the cotton trade of Bombay and the ginning and pressing industry in particular. Was a director of the Mofussil Co. and other joint stock companies and banking concerns. Was a member of the Municipal Corporation for the city of Bombay, the

Bombay Port Trust, the Improvement Trust and was Chairman of the Merchants' Bank of India. He owned a large number of cotton ginning and pressing factories in different parts of India. As a shrewd and cautious investor and financier his advice was frequently sought by members of the mercantile community whose confidence and esteem he enjoyed. Born in 1845; died in 1916. (P. 248.)

GEDDIS, ANDREW.

Born in Edinburgh in 1886 Mr. Andrew Geddis was educated in George Watson's College of the same town. Joined James Finlay & Co., Ltd., Glasgow, in 1902 and came out to their Bombay office in 1907. Worked as an assistant in the firm of Nowrosji Wadia & Sons from 1913 up to 1916 when he again joined James Finlay & Co., Ltd., and has since been associated with them in the management of the Swan Mills, the Finlay Mills, the Gold Mohor Mills and other concerns under their agency. Mr. Geddis has been an active member of the Millowners' Association for many years and was elected Chairman for 1926-27 during which period the Association had to deal with a difficult and complicated trade situation including acute depression in the mill industry, the enquiry by the Textile Tariff Board, the visit of Sir Charles Innes and of the International Textile Labour Delegation and other important matters. He has also been Chairman of the Millowners' Mutual Insurance Co., a member of the Port Trust, of the G. I. P. Railway Advisory Committee and a director of the East India Cotton Association. Was a member of the Sydenham College of Commerce Committee and sat on the "Kay" Committee which enquired into the Back Bay Reclamation Scheme in 1926. Is a director of the Bank of India and other commercial and joint stock concerns. (P. 269.)

The Late
GELLABHOY HARIDASS.

Had been connected with the Bank of Bombay for nearly 30 years and acted as the adviser and referee for advances made by the Bank to mill agents and others connected with the textile industry. Mr. Gellabhoy's knowledge of the financial position and prestige of Indian cotton merchants and millowners was unique and considerably helped the Bank officials in deciding on the advances and overdrafts on cotton, yarn, machinery and plant. (P. 685)

GIBBS, H. P.
M.I.E.E. (NEW YORK), M.I.E.E. (LONDON).

One of the best known of electrical engineers in India and an expert in electrical science and its application to industrial purposes. Mr. Gibbs came out to India in 1901 as Chief Engineer for the Kolar Gold Mines electrical installation at Mysore and was appointed engineer in charge of the Cauvery Power Scheme. Became Chief Electrical Engineer to the Government of Mysore in 1905 and when the construction of the Tata Hydro-Electric Works at Lonavla was taken in hand in 1911 he was appointed superintendent and has since been associated with Messrs. Tata in developing the additional hydro-electric schemes which have been described on pages 562 to 570. (P. 565.)

The Late
GOLL, E. A.

Was intimately connected with the pre-war German trade with India in aniline dyes and was the head of the Bombay office of Leopold Cassella & Co., Frankport, for 20 years and until his death in 1915. To Mr. Goll is due the credit of popularising and establishing the products of the Cassella Dye Works on a large and commercial scale in the cotton mills of Bombay and other provinces. There are a large number of Indians who are making their living as dyers and bleachers who had been trained in the laboratories established by Mr. Goll in Bombay, and where practical instruction in dyeing was given to students and apprentices. Mr. Goll was well known among Bombay millowners for nearly 25 years and died in Zurich in 1915. (P. 672.)

The Late
GORDHANDAS SOONDERDASS.

As a grandson of Mr. Mooljee Jaitha he took an active part in the firm of Mooljee Jaitha & Co. from 1892 and remained sole proprietor from 1899 till his death in 1902. He bequeathed Rs. 20 lakhs in charities from which Rs. 15 lakhs were endowed on Seth Gordhandas Soonderdas Medical College which has been started in Bombay in his memory.

The Late
GOSTLING, DAVID.
F.R.S.A.

One of the best known of architects and civil engineers. Came to Bombay in 1863 as an assistant to Scott Mackinnon & Co., and afterwards started the firm of "Gostling and Morris." Took an active part in the designing of large buildings and factories in the city including some of the largest cotton mills. Conceived the idea of utilising the rainfall on the Bhore Ghauts for industrial purposes and became an active member of the Tata Hydro-Electric Syndicate which was formed to put through the project. Died in 1908. (Pp. 565, 559, 678.)

The Late
GOVINDJI THACKERSEY MOOLJI.

Senior partner in 1890 in the firm of Thackersey Moolji & Co., one of the most progressive and well-known of Bhatbia firms in the Presidency. As a practical and sympathetic worker for the relief of distress and suffering among people and animals, Mr. Govindji had gained the esteem and affection of Government officials and the members of the various communities in Bombay with whom he came in contact. As a large cotton millowner he was respected by the investing public for his careful and commercial management of the various concerns under his firm's agency. He not only gave liberally from his earnings but worked personally in the famine and plague-stricken districts. He was as much a friend of the needy poor as of the dumb and suffering animals and his efforts for their relief were characterised by thoroughness and close application and by a liberality and broad-mindedness which were his own and secured the admiration and respect of all communities. He started the Bombay Grain Trading Company in collaboration with Mr. Narandas Purshotumdas for the express object of ensuring grain to the poor at reasonable rates, and rendered valuable services during the epidemic of plague in Bombay in 1896-98 and co-operated whole-heartedly with the Government officials for medical aid to the sufferers. Himself opened health camps at several places with a Plague Hospital and Detention Camp for members of his community. Mr. Govindji Thackersey was touring in Kathiawar in 1899 and exerting himself for the relief of the distress that was then prevailing, but had an attack of fever at Varvala where he died on September 8th in the midst of the humane work he loved to carry on. A large gathering of Europeans, Parsees, Hindus and Mahomedans connected with the mill industry in Bombay with thousands of the millhands met at Chinchpogly and bore testimony to Mr. Govindji's kindness and generosity as a large employer of labour. A memorial was voted to his memory and this appreciation of his good deeds is recorded by the photograph published on page 139. Born in 1849; died in 1900. (Pp. 125, 139.)

The Late
GREAVES, JAMES.

The pioneer of the cotton ginning and pressing industry in the Bombay Presidency. Mr. Greaves came out to India in 1866 after an experience of factory life in Lancashire and started business in Broach in partnership with Mr. George Cotton in 1868. Was the inventor of the leather roller for cotton gins which suited the Indian staple better than the American Saw Gin. Mr. Greaves, however, gave the use of this invention free to the public and did not patent it, with the result that the Macarthy cotton gin was introduced extensively in India and revolutionised the ginning industry in the country. He was also one of the pioneers of the mill industry in Bombay. Born 1820; died 1881. (Pp. 15, 643.)

The Late
GREAVES, JOHN R.

As a partner in the firm of Greaves Cotton & Co., Mr. Greaves was intimately connected with the mill industry from 1874 till his death in 1903. Born in Lancashire in 1853 he spent several years at the works of Platt Bros. & Co., Ltd., Oldham. Came to Bombay in 1874 to join Greaves Cotton & Co., and became the senior partner in 1899. Was Chairman of the Millowners' Association and of the Bank of Bombay and director of the several mills under his firm's agency and of other industrial concerns. (Pp. 643, 644.)

The Late
GREAVES, HERBERT RUFUS.

Educated in Lancashire with training in cotton spinning machinery. Joined the firm of Greaves Cotton & Co. in 1883 and conducted the Manchester branch for 10 years. Took charge of the Bombay office in 1903 as senior partner and considerably increased the progress and prosperity of the firm. In 1910 he was the largest employer of mill labour in India. Was a member of the Municipal Corporation of Bombay, of the Chamber of Commerce, the Millowners' Association, the Cotton Trades Association and the Port Trust. Elected Chairman of the Millowners' Association for 1910; member of the Legislative Council for 1911 and nominated Sheriff of Bombay for 1913. Born in 1861; died 1921. (Pp. 643, 645.)

GREAVES, J. B.

Son of the late Mr. Herbert Greaves and now senior partner in the firm of Greaves Cotton & Co., which was founded by his grandfather Mr. James Greaves in 1868. (Pp. 643, 645.)

The Late
HEERAMANEK, KAIKHUSRO M.

Mr. Heeramanek came into prominence during the boom period 1885-90 as an enterprising cotton merchant and mill promoter. Began life as a cashier in the B. B. & C. I. Railway and became a share broker in 1868. His energy and capacity for hard work brought success and he became a director of the Framji Cowasji Patent Press Co. and secretary and treasurer of the Bombay Press Co., then under the management of Bryce Brown & Co. Started his own firm of K. M. Heeramanek & Co. in 1880 and

floated the Bombay Cotton Press Co., of which he became managing agent. Was appointed *muccadum* of Gaddum Bythell & Co., and started pressing factories in different parts of the Presidency. Also projected the Queen Mill in 1883 and the Star Mill and the Brittania Mill in 1888 and acted as the managing agent and director of these concerns. Was a director of the Queen Insurance Company and the Coorla Mills and other joint stock concerns. Died in 1893. (P. 000.)

HUDSON, SIR LESLIE SEWELL, Kt.

An active and useful member of the European community in Bombay. Born in 1871 and educated at Christ's Hospital. Came out in 1894 as assistant in the Bombay branch of the P. & O. S. N. Co., after working at the Head Office in London from 1889. Was sent to the branches in China, Japan and Australia and returning to Bombay in 1915 he became a partner in the firm of Mackinnon Mackenzie & Co. in 1922. Has taken active interest in the trades and industries of Bombay. Vice-President of the Bombay Chamber of Commerce for 1923-24 and President for 1924-25 and 1927-28. Elected member of the Bombay Legislative Council for 1924-25 and 1927-28. Has been a Trustee of the Port of Bombay since 1924. (Pp. 686, 688.)

HUNT, N. GREAVES.

Born in 1877 at Heaton Mersey and educated at Manchester Grammar School. Entered the firm of James Greaves & Co., Manchester, in 1893. Went to South Africa in 1899-1901 with the Imperial Yeomanry. Came out to Bombay in 1903 as assistant in the old-established house of Greaves Cotton & Co. Took an active part in the development of the firm's business with the late Mr. Herbert Greaves and became a partner in 1908. Member of the Millowners' Association and its Chairman for 1910. Now partner with Mr. J. B. Greaves in the firm of Greaves Cotton & Co., who are Managing Agents of Greaves Cotton & Co., Ltd. (Pp. 643, 645.)

ISHWARDAS LUKHMIDAS.

Born in 1872 Mr. Ishwardas Lukhmidas has been closely associated with the firm of David Sassoon & Co., Ltd., as yarn and cloth broker and as director of the Sassoon Mills, the Sassoon and Alliance Silk Mill, the Union Mills, the Port Canning Land Improvement Co. Is also director of other industrial concerns including The Bundi Portland Cement Co., Ltd., and the Punjab Portland Cement Co., Ltd., member of the Indian Merchants Chamber, the Bombay Port Trust and the Municipal Corporation. Member of the Committee of the David Sassoon Industrial Reformatory School and various other charitable and public institutions. Appointed Sheriff of Bombay for 1924. (P. 204.)

The Late
JAMSETJEE, NUSSERWANJI S.

Auditor and Accountant (*see* pages 282 and 537).

JEHANGIR, SIR COWASJEE (Baronet).

Born in 1853 Sir Cawasjee Jehangir has been connected with the mill industry in Bombay and has interested himself in the financing of industrial projects such as the Tata Iron & Steel Co., the Hydro-Electric Power Supply Co., the Jubilee Mills, the Hope Mills and other concerns. He is a Fellow of the University of Bombay and was appointed Sheriff for the year 1919. (Pp. 277.)

JEHANGIR, SIR COWASJEE (Junior).

K.C.I.E., C.I.E., O.B.E.

Member of the Executive Council of the Governor of Bombay. Born in 1879 and educated in Bombay and at St. John's College, Cambridge, from which he graduated M.A. Has taken an intelligent part in the public life of Bombay. Served as an active member of the Municipal Corporation from 1894 to 1921 and was elected Chairman of the Standing Committee for 1914-15 and President for 1919-20. Rendered valuable services during the war period and in other ways for which he received the O.B.E. in 1918 and the C.I.E. in 1920. Has held the post of Member of the Executive Council with marked ability and success, his appointment having met with universal approval. Received the K.C.I.E. in 1927. (P. 255.)

The Late
JEJEEBHOY, RUSTOMJEE BYRAMJEE.

A highly respected and useful member of the Parsi community. Was director of the New Great Eastern Mills, the New City of Bombay Mill, the Colaba Land Mills, the Bradbury Mills, the Manekjee Petit, the Framjee Petit, the Coorla Mills, and other commercial concerns. Appointed Sheriff of Bombay for 1923 but died of heart failure while taking the oath. Born 1864; died 1922. (P. 249.)

JEJEEBHOY, SIR JAMSETJEE (Baronet).

K.C.S.I.

Head of the Parsi community. Born in 1878 and educated in Bombay. Member of the Municipal Corporation and Vice-President of the Legislative Assembly. Director of a large number of cotton mill companies and banking and industrial concerns. (Pp. 256, 684.)

JHABWALLA, S. H.

One of the most active of the workers in the cause of the labouring classes and the factory operatives in Bombay. Has initiated and organised several Labour Unions and has acted as their secretary and in other capacities. A well educated man his services have been of particular use to the working classes and the Trade Unions whose grievances he has voiced with vigour and tenacity in the local Press and before Government and employers. (Pp. 485 to 488).

JOSHI, NARAYAN MALHAR.

M. L. A.

Has taken an active interest in the labouring classes and the cotton mill operatives in particular. The principal worker and organiser of the operations of the Social Service League. Initiated Welfare Work among the millhands and carried it on successfully till 1926. Born in 1879, educated in Poona and graduated from the Deccan College in 1899. Member of the Municipal Corporation, Bombay, from 1919 to 1923. Nominated by Government on the Legislative Assembly in 1921, in 1924, and in 1927 as a representative of the Labour interests. A prominent member of the Servants of India Society since 1909. Secretary of the Social Service League and of the Bombay Presidency Social Reform Association and of the Western India National Liberal Association. Represented the Indian Press in 1917 at Mesopotamia on behalf of the Government of India. Attended the International Labour Conference at Washington in 1920 and at Geneva in 1921-22-23 as delegate of the working classes in India. Awarded the Kaiser-i-Hind Silver Medal in 1919. Awarded the C.I.E. in 1921 which he declined. (Pp. 485 to 488.)

JOYNER, R. B.

C.I.E., M.I.C.E.

An experienced civil engineer in the service of the Government of Bombay in the Public Works Department until his retirement in 1905. Possessed considerable knowledge of water works and hydro-electric projects including the Gokak Water Falls. Mr. Joyner designed and supervised the whole of the Hydraulic Works for the Tata Hydro-Electric undertaking at Lonavla including the dams, the ducts and other work in connection with the three lakes. (Pp. 559 to 565.)

The Late
KAPADIA, PESTONJI DOSSABHOY.

A practical hand loom weaver who came from Surat as manager of the Sassoon and Alliance Silk Mill in Bombay in 1875. He had sent his own hand-made silk and cotton fabrics to Mecca, Jeddah, Bassara and Portugal and his appointment as manager considerably increased the business of the Sassoon Mills. Though ignorant of the English language he managed to carry on the work and look after the European assistants, and the success of the silk mill encouraged David Sassoon & Co. to appoint Mr. Kapadia the manager of the Sassoon Cotton Spinning and Weaving Mill in 1895. Mr. Kapadia however died in 1896 and his place as a practical hand loom weaver and business man has been difficult to fill.

The Late
KHATAU MAKANJI.

Was the father of Mr. Moolraj and the late Mr. Gordhandas Khatau, two well-known Bhathia merchants and millowners of Bombay. Mr. Khatau Makanji was one of the pioneers of the mill industry in Bombay having started the Khatau Mills near Byculla Bridge in 1874. He first purchased in 1872 the Mangaldas Mill which was projected by Sir Mangaldas Nathubhai early in 1860 and called it the Bombay United Mill which was worked by Mr. Gordhandas Khatau and latterly by Mr. Mulraj Khatau till it was transferred to The Tata Mills Ltd. in 1920. Mr. Khatau Makanji died in 1876 leaving the management of his mills in the hands of his brother Mr. Jairaj Makanji until the sons came of age. Born 1818, died 1876. (P. 17.)

The Late
KHAREGAT, PESTONJI.

Auditor and Accountant (see page 281).

KAY, SIR JOSEPH ASPDEN, Kt.

Managing Director, W. H. Brady & Co., Ltd., mill agents and machinery importers. One of the most active and prominent of Bombay citizens. Born in 1884 and educated at Bolton, Lancashire. Sir Joseph Kay has rendered valuable services in the advancement of the trades and industries of the city. Has been one of the most active members of the Millowners' Association, and its Chairman for 1921 and 1922. Member of the Bombay Chamber of Commerce and its Chairman for 1926. Member of the East India Cotton Association, the Technical and Industrial Education Committee, the Improvement Trust, the Port Trust and Vice-President of the Indian Central Cotton Committee. Appointed Chairman of the Back Bay Reclamation Committee in 1926. Attached to the Auxiliary Force as an officer of the Bombay Light Horse. President, Western India Football Association from 1925-27. Received the Knighthood in 1927 for his public services and multifarious activities as a merchant and millowner. (Pp. 260, 650 to 653.)

KNOWLES, JOHN.

M.I.M.E.

Educated in Manchester and received training in engineering at the Bridgewater Trust at the age of 13. Went to W. J. Galloway & Sons, and assisted in the working of Bessemer steel plant and industrial machinery. Came out to a mill in Broach in 1870 and went to Ahmedabad in 1880. Succeeded Mr. Isaac Alcock at the Dharamsey Poonjabhoy Mills, Coorla, in 1882. Thence worked as consulting engineer, until he was engaged by the Bombay Association of Fire Insurance Agents as Inspector of Fire Extinguishing Apparatus. Became a partner in Bradbury Brady & Co. in 1899. Retired in 1915. (P. 219.)

LAKIN, H. H

One of the most competent of Lancashire mill managers who have come out to India and risen to the rank of mill agent and machinery importer. Mr. Lakin arrived in Bombay in 1906 after serving at the Buckingham Mills, Madras, for six years. He took charge of the Colaba Land Mill and the Jehangir Wadia Mill which have ranked amongst the most successful of joint stock concerns. His superior knowledge and education attracted the attention of mill and machinery agents and he was taken a partner in the firm of W. H. Brady & Co., Ltd. In 1916 the agencies of the Colaba Land Mill, the New Great Eastern Mill, the New City of Bombay Mill and the Empire Dyeing Co. were taken over by W. H. Brady & Co., Ltd., and Mr. Lakin's extended experience and personal contact with these mills enabled him as director to contribute materially towards the success of these concerns. Mr. Brady retired in 1919 and the management and supervision of the several cotton mill companies devolved chiefly on Mr. Lakin whose practical knowledge and experience as a textile expert have helped forward the prosperous working of the factories. Mr. Lakin also extended the machinery agency department of his firm, being personally known to mill agents and managers in every centre of the textile industry in India. (Pp. 650, 651).

LALJEE NARANJEE.

M.L.C.

One of the most progressive and cultured members of the Bhattia community and senior manager in the firm of Mooljee Jaitha & Co. Born in 1878 Mr. Laljee Naranjee has not only maintained the best traditions of his race as a shrewd and successful cotton merchant and millowner but has advanced with the times and taken an intelligent part in the deliberations of the Bombay Legislative Council on which he has been elected by the Indian Merchants Chamber, of which he has been an active worker and Chairman for 1921 and 1926. Has been a member of the Millowners' Association and director of the Finlay Mill, the Swan Mill, the Gold Mohur Mill and other joint stock companies. (P. 277.)

SIR LALUBHAI SAMALDAS, Kt.

C.I.E.

Sir Lalubhai has identified himself actively with the progress of banking and co-operative institutions and industrial enterprises of various kinds. Born in 1863 he was educated at the Bhavnagar High School and the Elphinstone College. Was Secretary to the Maharaja of Bhavnagar and Revenue Commissioner of the State till 1899. One of the promoters of the Bombay Central Co-operative Bank and the Bank of Baroda of which he is the Chairman. One of the founders of the Indian Cement Co., and the Scindia Steam Navigation Co. President of the Industrial Conference held in Karachi in 1913. President of the Indian Merchants' Chamber for 1917-18. Member of the Maclagan Committee on Co-operation 1914-15, and President of the Mysore Co-operative Conference, 1915 and Mysore Co-operative Committee, 1921-23. Member of the Indian Mercantile Marine Committee, 1923-24. Member of the Senate of the Bombay University. Nominated to the Bombay Legislative Council in 1916, 1919 and 1920, and elected to the Council of State in 1920. Acted as Revenue member of the Bombay Executive Council in 1923. Director of several industrial and banking concerns, cotton mills and joint stock companies. Received the C.I.E. in 1914 and the Knighthood in 1920. (P. 277.)

The Late
LENTIN, COWASJEE FRAMJI.

Was weaving master at the Bombay United Mill in 1882 and purchased the Ookerda Khetsey Mill at Parel in 1895 and worked it under the name of the Wahabai Mills till his death in 1896. (See page 29.)

LESLIE-ROGERS, J. B.

Succeeded Mr. Noel-Paton as Secretary to the Bombay Chamber of Commerce and the Millowners' Association in 1905 and resigned in 1911. Possessed intimate knowledge of India and her people which was gained during his stay of twenty years in the country. His experience extended from Karachi to Calcutta, and the border of Afghanistan to Bombay. Had lengthy experience of tea-planting, being President of the Planters' Association in Dehra Dun, where his work in the scientific production of tea formed a valuable contribution to the industry. Was the chosen delegate of his district at a con-

ference held by Sir James Lyall Lieutenant-Governor of the Punjab, for re-opening the old trade routes to the markets of Afghanistan and Central Asia, and was subsequently nominated by the Indian Government to represent the tea and trade interests of Upper India and Lord Roberts' mission to Cabul. A ready observer and an active worker, his ideas took literary form in the *Pioneer*, and other leading Indian papers on the "Indian Tea Industry," "Trans-frontier and Central Asian Trade," "Consultative Intelligence Bureau," "The Economic Theory of Plague," "Frontier Politics" and "Municipal Politics," etc. A distinguished Volunteer Officer, he was Major Commandant of the Dehra Dun Mounted Rifles, and was the first Volunteer Officer selected by the Government to be sent with regular troops across the North-West Frontier in the Hazara Expedition. Was specially mentioned in the dispatches, and received a medal and clasp with the Long Service medal. His article on "Telephotography in Modern Warfare" gained a special prize in the United Service Institution of India. (P. 532.)

The Late
LOKHANDE, R. B.

President of the Bombay Millhands' Association in 1896. Editor and Proprietor of *Din Bandhu*, a paper for the workpeople. Fought with much vigour and perseverance for the rights and privileges of the mill-hands over whom his influence was considerable. As their adviser he rendered valuable services during the Hindu-Mahomedan riots of 1893. Died in 1897.

The late
MACBETH, JOHN B. K.

Mr. Macbeth arrived in Bombay in 1882 to supervise the erection of steam engines for cotton mills supplied by J. & E. Wood of Bolton. His expert knowledge and hard working capacity made a favourable impression on mill agents who consulted him on their difficulties in connection with the power plants. In the case of a new compound condensing engine by Hick Hargreaves & Co., Ltd., the agents of the mill where it was to be fitted accepted Mr. Macbeth's offer to supervise the erection and the work was carried out to the satisfaction of the mill agents as well as the engine builders. Mr. Macbeth made his way and secured several important agencies, the energy and patience with which he induced millowners to instal self-acting fire appliances entitling him to rank among the pioneers in the introduction in India of automatic sprinklers. The present extended use of the Grinnel Sprinkler has been due in a great measure to the introductory work done by Mr. Macbeth at a time when automatic protection against fire was not understood or appreciated by factory owners. Mr. Macbeth founded the firm of Macbeth Brothers & Co. in 1885 and had the satisfaction of making it a successful concern. He died in 1914 after which the firm was converted into a joint stock company. (P. 661.)

MALONEY, T.
M.C., A.M.C.T.

Secretary Millowners' Association, Bombay. Born in Hyde in 1892 and educated at the County School and the Manchester College of Technology. Secured numerous diplomas and certificates in mathematics, mechanics, chemistry and textile designing. Holds the degree of Associate of the Manchester College of Technology in Textile Manufacture, and First Class Honours and full Technological Certificates in cotton spinning and weaving. Passed the examination for Factory Inspectors in 1919. Served an apprenticeship of six years with Ashton Bros., Ltd., cotton spinners and manufacturers, and gained first-hand practical experience in carding, spinning and weaving. Was subsequently appointed designer and assistant manager in a Bolton mill. Enlisted during the war as a Private in the Cheshire Regiment; gained a Commission in 1917 and won the M.C. in 1918 whilst serving with the Machine Gun Corps. Demobilised with the rank of Lieutenant in 1919 after five years' active service, and was employed as yarn and cloth salesman on the Manchester Exchange, till 1921, when he was sent out to Bombay as adviser to the Government of India on the evolution of efficient ventilation and humidification standards for the cotton mills. Submitted a report on the subject after two years' careful investigation with definite recommendations to bring about amelioration in the working conditions of the factories which were accepted *in toto* by the Government of India. (Pp. 534, 535.)

MANNHEIM, DR. JOHN.

An electrical expert who came out to India in 1905 on behalf of Alfred Dickinson & Co. to investigate into the hydro-electric scheme for Lahore. Was again sent out by the same firm to study the proposals of Mr. David Costling in connection with the Tata Hydro-Electric project at Lonavla and co-operated with Messrs. Tata in the engineering investigations and the financing of the scheme. (Pp. 559, 561.)

The Late
SIR MANGALDAS NATHUBHAI, Kt.
C.S.I.

Was the first Hindu citizen of Bombay to receive the Knighthood. Member of the

Bombay Legislative Council from 1866 to 1874. Was a public-spirited citizen who rendered useful services in his day, and gave large sums in charity. Was the head of the Kapol Bania community in Bombay. Projected the Mangaldas Mills at Girgaum in 1860 this being the seventh spinning and weaving mill in Bombay. The mill was transferred in 1870 to Mr. Khatau Makanji and called the Bombay United Mills. Born in 1832; died in 1890. (P. 17.)

The Late
MARZBAN, PHEROZSHAW MERWANJI.

Mr. Marzban had a life-long connection with the cotton trade of Bombay where he was born in 1852. From a very early age he worked at the cotton pressing factories belonging to Framji Cowasji Banaji. He also managed the Scott Press of Richie Stewart and in time became Agent of the Bombay Press Co., Ltd., at Colaba. Had also an interest in the Indian Cotton Co. and the New Berar Press Co., of Gaddum & Co., and enjoyed the confidence of cotton dealers and exporters for his accurate knowledge of the different varieties of cotton, their spinning values and other characteristics. He was also connected with the Agency business of the Queen Mill, the Star Mill and the Britannia Mill which were projected and worked by Mr. K. M. Heeramanek. Mr. Marzbán retired from active work in 1917 and died in 1926. (P. 606.)

The Late
MARSHALL, JOHN.

Secretary of the Bombay Chamber of Commerce and the Millowners' Association from 1884 till his death in 1898. Received his commercial training in Liverpool and arrived in Bombay in 1863 to join the house of James Wright and Co. Established the Bombay Flour Mills in 1884 and managed it as agent. Also became secretary to the Chamber of Commerce, the Millowners' Association, the Bombay Underwriters' Association, and the Bombay Cotton Company. Here he found full scope for his special talents. As an accurate and methodical thinker he expressed himself in vigorous and concise language in his numerous reports on important questions. Took an active interest in the affairs of the Millowners during the most critical periods and notably during the discussion raised in 1895 by cotton manufacturers in the United Kingdom upon the cotton duties levied on British products. He was a member of the deputation which visited Calcutta on behalf of the Association to give evidence upon the subject before Sir James Westland. Represented in India the firm of Dobson and Barlow, Limited, Bolton, till 1898. Appointed Sheriff of Bombay for 1890.

The Late
MEHTA, SIR BEZONJI DADABHOY, Kt.

Sir Bezonji Dadabhoy Mehta's name has been intimately associated with the success and prosperity of the cotton mills under Messrs. Tata's agency. Joining the Empress Mill at its start in 1876 he was the right-hand man and adviser of Mr. Jamsetji Tata when the latter overhauled and converted the old Dharamsey Mills at Coorla into the Swedeshi Mills in 1899. Born in 1840 Sir Bezonji began life as a petty clerk in the G. I. P. Railway with limited literary qualifications. His honesty and abilities, however, secured for him a higher post from which he was removed by Mr. Tata to Nagpur which had been proud to hold Sir Bezonji as one of its most useful and esteemed citizens. While most of his time was necessarily spent at the Empress Mills the innovations introduced by him in ring spinning and in the spinning of finer counts and in other directions proved instructive to many a mill agent in Bombay who not only acknowledged the efficiency and economy of his management but often emulated his methods and solicitude for the welfare of the workpeople. Sir Bezonji retired from active work in 1919 and died in May 1927. (P. 670.)

MEHTA, HORMASJI MANEKJI.

Born in Bombay in 1871 Mr. Mehta has risen from the rank of a clerk in His Majesty's Mint to the position of one of the most successful of millowners, merchants and machinery importers. Started the Mill Stores Co. in 1897. Purchased the Victoria Mill in 1904 and the Jubilee and the Raja Goculdas Mills in 1917. Established the firm of T. R. Pratt, Ltd., motor car importers, in 1915. Founded the Zenith Insurance Co., Ltd., in 1916 and the M. T., Ltd., in 1920. Was also promoter and organiser of the Poona Electric Supply Co., Ltd., in 1917 and the Uganda Commercial Co. in 1918. Founder of the British India General Insurance Co., Ltd. in 1918. Started an agency business for machinery and mill accessories in 1904. Has visited Europe several times and formed important connections with the leading manufacturers and exporters in Great Britain and the Continent. Founder and active partner in the firm of H.M. Mehta & Co., one of the most prominent of the local firms connected with the textile and allied industries of the country. (Pp. 259, 654.)

MEHTA, KUVERJI MERWANJI.

One of the oldest and most active of stock and share brokers in Bombay. Mr. Mehta has been well known for his fight against company mismanagement at the general meetings of shareholders. Has taken an

active part for the protection of investors and against the infringement of their rights by the managing agents and directors. (P. 685.)

The Late
MEHTA, NUSSERWANJI K.

A practical and experienced weaving master who had been connected with the cotton mills since 1875. Mr. Mehta got his first post as weaving master at a mill in Broach and came to Bombay in 1878 in charge of the weaving shed of the Khatau Makanji Mill. Was subsequently employed at the Indian Mill, the Colaba Land Mill, the Hindustan Mill and the New Great Eastern Mill where (latter) he also acted as manager. Started business from 1903 as a cloth selling agent in Bombay and Calcutta for the Kurla Mill, the Globe Mill, the Lord Reay Mill, the Maneckji Petit Mill Co., and other mills outside of Bombay. Belonging to the old school of factory trained weavers Mr. Mehta's practical experience of the weaving of cloth suitable for the different markets proved of service to millowners. He was among the first to weave fancy cloth and was credited as being the first weaving master to introduce the use of chloride of magnesium in the sizing of warp yarns. Born in 1850; died in 1913. (P. 314.)

MEHTA, PIROJSHA N.
L.T.M., A.M.S.T.

One of the most successful of the students of the V. J. T. Institute from which he passed out in 1897 with the highest scholarships for the first two years, and Lord Reay Gold Medal with Honours Diploma. Worked as weaving master in several mills between 1898 and 1903. Was the first to obtain the Government of India State Technical Scholarship in 1905 and proceeded to Manchester and obtained the Certificate in the Faculty of Technology of the Victory University and Honours Diploma of the Municipal College of Technology of that city. At the City and Guild of London examination he obtained the highest award of the Silver Medal and Money prize in carding and spinning and also First Class Honours, and Bronze Medal and First Class Certificates in various textile manufacturing and designing subjects and in bleaching, dyeing, printing and finishing of textile fabrics. Returned to India in 1908 when he was appointed Textile Expert to the Government of Bombay to organise and conduct a survey of the hand-loom weaving industry in the Presidency. This was completed in 1909 from which period Mr. Mehta has been acting as technological expert and adviser to different cotton mills in India and is also interested in the import of English yarns, piece-goods, and textile machinery. (P. 581.)

MEHTA, J. K.

Secretary of the Indian Merchants' Chamber and an acknowledged authority on questions of finance, currency, exchange and economics. Has rendered useful services in other directions. (P. 539.)

MEHTA, THE HON. SIR CHUNILAL VIJBHUKHANDAS.

The Hon. Sir Chunilal Mehta is an enlightened and esteemed member of the Hindu community and has been prominent as a millowner, merchant and director of important joint-stock companies and public utility undertakings. Has been a member of the Executive Council of the Government of Bombay after 1923 and Minister for 1921-23. Born in 1881; graduated M.A. from the St. Xavier's College; member of the Municipal Corporation since 1907 and President for 1910; also Chairman of the Standing Committee for 1913. Represented the Corporation on the Bombay Legislative Council in 1916. Member of the City Improvement Trust and the Bombay Port Trust. Chairman of the Indian Merchants' Chamber for 1918. (P. 255.)

The Late
MEHTA, SIR PHEROZSHAW M.
K.C.I.E.

In the Indian communities Sir Pherozshaw Mehta's name and personality were abiding possessions for nearly fifty years, few Indians being so continuously active in the public life of the country. Matriculated in 1861, graduated B.A. in 1863, passed his M.A. with honours six months later, ran his term as the first Parsi Barrister in London and passed out creditably from Lincoln's Inn in 1867. Returning to India in 1868 he began a life of public usefulness which has scarcely been equalled in point of all-round activity, disinterestedness of purpose or the high motives which actuated long years of strenuous toil in the interest of his countrymen. In the civic life of Bombay Sir Pherozshaw Mehta's name has been a household word and it is here that his loss is being felt the greatest. Born 1845; died 1915. (P. 684.)

The Late
MICHAEL, CHARLES JOHN.

Assistant secretary of the Bombay Chamber of Commerce and the Millowners' Association from 1882 to 1908, also acted on several occasions as chief secretary for both institutions and for the Bombay Cotton Traders' Association and the Bombay Underwriters' Association. During the extended tenure of his office, Mr. Michael's knowledge and experience proved of con-

siderable value to the Chamber. He was actively associated with the Calcutta Exhibition of 1883, the Committee of which presented him with a Bronze Medal in appreciation of his services. The short time movement proposed for the local cotton mills received his careful consideration and his reports and observations on the subject were appreciated by the millowners. The introduction of the nickel coin and the imposition of the excise duty and other measures affecting the mill industry in Bombay were dealt with by Mr. Michael to the satisfaction of the millowners who appreciated the devotion with which he conducted their affairs. He wrote The History of the Chamber which formed part of the "Cyclopædia of India" which was published in 1907. Born in 1863; died in 1908. (P. 532.)

The Late
MODY, BURJORJI RUSTAMJI.

Born in 1828 in Bombay and educated at the Elphinstone Institution. Spent several years in China as a prominent merchant, being at one time a partner with Mr. Nusserwanji Tata. On his return to Bombay in 1873 he helped to promote the Sassoon Spinning and Weaving Co., Ltd., and was appointed joint Managing Agent with Mr. E. Moses of David Sassoon & Co. The mills were managed ably and at the termination of the Agency agreement in 1885 Mr. Mody severed his connection and did other business on his own account, being a prominent figure in the commercial life of Bombay. Died 1895. (P. 246.)

MODY, HORMUSJI PEROSHAW.
(ADVOCATE).

An accomplished scholar and writer and a useful citizen. Born in 1881 he graduated at the age of 22, became M.A. in 1904, passed the LL.B examination in 1906 and became Dakshina Fellow for 2 years at St. Xavier's College. Published "Political Future of India" in 1908 and won a prize offered by Sir Robert Laidlaw, M.P. Became an Advocate in 1910, and Professor of Law for some time in the Government Law School in 1920. Published the biography of Sir Pherozshaw Mehta in 1921, the only complete work of its kind. Member of the Bombay Corporation since 1913, and Chairman of the Standing Committee for 1921-22 and President for 1923-24. Actively connected with various public institutions in Bombay. Member of the deputation which waited on Mr. Montagu and Lord Chelmsford on behalf of the Parsis and gave evidence before the Franchise Committee in connection therewith. Became partner in 1926 in the firm of C. N. Wadia & Co., Agents for the Century Mills. Elected Chairman of the Millowners' Association for 1927. (P. 269.)

The Late
MODY, PEROSHAW BURJORJI.

Born in 1857 and educated at St. Xavier's College Mr. Mody was connected for many years, like his father, with the Sassoon Spinning and Weaving Mill, of which he acted as manager till his retirement in 1888 on account of ill health. After some years, however, he became manager of the Port Canning and Land Improvement Co., and remained in this post till a short time before his death in 1923. Was a director in several concerns under the agency of David Sassoon & Co. (Pp. 299, 314.)

The Late
MOOLJI, THACKERSEY.

Founder of Thackersey Moolji & Co. in 1870 which has continued to be one of the best known among the Bhathia firms in Bombay. Mr. Thackersey traded largely in cotton and started the Hindoostan Mill in 1873 and his sons Messrs. Damodhur and Govindji kept up the father's prestige and enterprise by further extending the cotton mills and other factories. Born in 1797; died in 1888.

The Late
MOOLJI JAITHA.

Founder of the firm of Moolji Jaitha & Co., one of the oldest and most respected of trading houses in the Bhathia community (*see* Soonderdas Moolji, page 725).

The Late
MORARJI GOCULDAS, C.I.E.

Mr. Morarji Gocouldas was one of the most enlightened and progressive members of the Bhatia community at the early stage of the mill industry in Bombay. Born in 1833 he studied the English language and book-keeping according to the English system, an acquisition which was rare in those days among the members of his community. He co-operated with his uncles in the British piecegoods business with marked intelligence and considerable success and was made a partner in the firm. His fortune was made and in 1856 he purchased the "George the Third" Jute and Wool Factory in Bombay in partnership with other capitalists and converted it in 1870 into the Morarji Gocouldas Mill which has ranked amongst the most prosperous of joint stock concerns in the city. He started the Sholapur Mill in 1874 which has also maintained the highest reputation for efficiency and dividends. He purchased the Mandvi Mill from the liquidator in 1880 and converted it into the Mahalaxmi Spinning Mill. He was a member of the Bombay Legislative Council, of the East Indian Association, of the Mill-

owners' Association, the Municipal Corporation of Bombay and a Fellow of the Bombay University. Gave instructive evidence on the sufferings of the people before the Famine Commission of 1880. A kind-hearted and sympathetic employer of labour he gained the regard and affection of the workpeople and received the C.I.E. in 1878 in recognition of his public services. Died in 1880. (P. 15.)

The Late
NARE, BHIWANJI RAMJI.

The pioneer of primary education and libraries for the work-people in Bombay and the founder of the Kamgar Hitwardhak Sabha of which he was president for eight years. Began his career as an operative at the Dinshaw Petit Mill and was then employed at the Morarji Gocouldas Mill as weaving master on a salary of Rs. 250. Commanded great influence among the operatives and the employers. Set up a night school in 1874 at his own expense and developed it into a day school with the help of his subordinates. This school was known as "Nare and Mandali's Free School" and had been imparting free primary education to the children of the poor millhands. Mr. Nare set up two other free primary schools, but for want of funds he had to close them after he retired from his work in 1906. Died in 1917.

The Late
NAROTAMDAS, SIR HURKISONDAS.

A prominent member of the Kapol Bania community. Was a director of the Colaba Land Mill, the Morarji Mill and other industrial concerns. Promoted the Globe Mill in 1806 with Sorabji Shapurji & Co. Was a member of the Bombay Corporation and helped to form the Ripon Textile School in connection with the Victoria Jubilee Technical Institute. Gave Rs. 1,00,000 for the Lunatic Asylum at Thana. Appointed Sheriff of Bombay for 1902. Born in 1849; died in 1908.

✓ NAROTTAM MORARJEE.

Second son of the late Mr. Morarjee Gocouldas, one of the pioneers of the mill industry in Bombay. Mr. Narottam has ranked among the progressive millowners and taken an active interest in the welfare of the mill operatives. The Sholapur Mill has been managed by him with the greatest efficiency and economy and now ranks among the most prosperous concerns of its kind. Was a member of the Millowners' Association and its Chairman for 1914. Has been connected as director with important joint stock companies and public utility concerns and has been the chief promoter of the Scindia Steam Navigation Co., Ltd., the first venture of its kind to be started with Indian capital and under Indian management.

The Late
NARIELWALLA, S. S.

One of the pioneers in the importation of cotton mill stores in Bombay, and the largest holders of stock of mill and other accessories, between 1880 and 1892. Died in 1893 leaving the business in the hands of his sons.

NEILSON, WILLIAM HARDCASTLE.
O.B.E., V.D., M.A., M.A.I.

Chairman, Bombay Port Trust. Born in 1875. Passed out of Trinity College, Dublin, and served as Assistant Engineer in 1900 at the Keyham Dockyard Extension, Devonport. Came to India in 1905 as Assistant Engineer to the Calcutta Port Commissioners; became Port Engineer to the Chittagong Port Commissioners in 1907, Chief Engineer to the Karachi Port Trust in 1910, Chief Engineer to the Bombay Port Trust in 1922 and Chairman, Bombay Port Trust, in 1923. Controller of Munitions, Karachi Circle, 1917. Lt.-Col., Bombay Battn. A.F.I.; Honorary Presidency Magistrate, Bombay; Municipal Councillor and Chairman, Drainage Committee; member, Improvement Trust Committee, G.I.P. Railway, B.B. & C.I. Railway, Development Directorate Advisory Committee; President, Indian Ports Association and Bombay Y.M.C.A.; Member, Inst. Civil Engineers, Inst. Mechanical Engineers, American Soc. C.E., President, Inst. Engineers (India). Author of "Report on Grain Elevators in Canada and United States." (Pp. 551, 670.)

The Late
NISSIM, CHARLES.

The late Mr. Charles Nissim was well known in Bombay as Mr. S. M. Moses in 1907 and was the managing partner of David Sassoon & Co. Born in Bombay in 1845 he was educated at the Elphinstone School and proceeded to China in 1862 for commercial training. Returned to Bombay in 1880 after an extended tour in Europe and joined the firm of David Sassoon & Co. Was a member of the Bombay Port Trust and the Board of the David Sassoon Industrial Reformatory. Was elected President of the Bank of Bombay in 1890 and in 1904, being the first member of the Jewish community to enjoy this distinction. Served on the Executive Committees for the Famine Relief Fund and was a Trustee of the Countess of Dufferin Fund and did volunteer work during the plague epidemic. Was a member of the Chamber of Commerce and the Millowners' Association and a Fellow of the Bombay University. Nominated on the Bombay Legislative Council in 1900 and in 1902. He was an accomplished linguist and retired from India in 1903 and assumed the name of Charles Nissim in 1907. Died in 1918. (P. 248.)

NISSAR, A. R.

E.E., M.A.I.E.E., M.A.S. MECH. E.

Lecturer in electrical engineering, and Head of the Electrical Department of the Calcutta Technical School, Calcutta. Mr. Nissar who is one of the most accomplished of electrical engineers, received his early training at the Universities of Punjab, Allahabad and Calcutta, and subsequently at the Ohio Northern University in America. Graduated with honours in Electrical Engineering in 1900. Was apprenticed to Ada W. H. & L. Company and Automatic Electric Company, U.S.A. Subsequently joined Commonwealth Edison Company, Chicago, as Electrical Inspector, and worked in several capacities in the Testing, Sub-stations and Generating Operating Departments including the Fisk Street Generating Station—the then largest steam turbine station in the world with a capacity of 120,000 KW. Resigned this post to study the Central Station operations, and during three months covered Eastern States in U.S.A., France and England, eventually accepting a post with the Chatham and District Light Railway Company as Assistant Electrical Engineer. This post he held until August 1912, when he left Europe to accept an educational appointment with the V.J.T. Institute, Bombay. Mr. Nissar remained connected with this Institute for 15 years first as Head Assistant and then as Deputy Head of the Electrical Engineering Department and Head of the Electrical Apprenticeship Classes. During his period of service with the Institute Mr. Nissar went to Europe on leave in 1920 and carried out an extensive study in educational and industrial matters, visiting among others the works of C. A. Parsons & Co., Newcastle-on-Tyne; Reyrolle & Co., Hubburn-on-Tyne; Bruce Peeble & Co., Edinburgh; Metropolitan-Vickers, Manchester; Tudor Accumulators, Dunkenfield, C.A. Vandervell, London; Francais Thomson-Houston, Paris, Societe Anons des Atelers de Scherons, Geneva, and Bernische Kraft Work, Berne. Also visited amongst others the following institutions:—The Loughbrough Technical College; Rutherford College, Manchester Technical College, Liverpool University; Royal Technical College, Glasgow; Sorbonne, Paris; L'Ecole de Tessage, Lyons, France, and the Polytechnic Institute, Milan, Italy. Was granted leave by the Institute for one year in 1924 to carry on research work in Railway Electrification and during this period he covered the U.S.A., Italy, France, Switzerland and England including the various systems of electrification. The Westinghouse Electric and Manufacturing Co. of East Pittsburgh, U.S.A., also invited him to join the Professors' Conference at their works for his special study in Railway Electrification, it being the first time that an engineer-educationist from India was accorded this distinction. The Pennsylvania Railroad, the New York Central, the New York New Haven and Hartford, the Long Island, and West Jersey and Sea Shore Railroads as well as the General Electric Company, U.S.A., afforded him similar opportunities. In Europe he examined the systems of Federal State Railways in Italy and Switzerland, Midi Railway and Paris-Orleans Railway in France, North Eastern Railway and Southern Railways in England as well as the manufacturing works of the English Electric Company, Construction des Electrique des France, Brown Boveri, Switzerland, Ansaldo, Italy, and several others. As a result of this investigation Mr. Nissar has made valuable contributions on the subject in the *Indian Textile Journal*. Mr. Nissar is a member of the American Institute of Electrical Engineers, American Society of Mechanical Engineers, Society for the Promotion of Engineering Education and Institution of Engineers (India) and a past member of the Illuminating Engineering Society. He was also responsible for organising the Bombay Association of the Institution of Engineers (India) of which he was the Honorary Secretary until his departure to Europe in 1924. He has also contributed valuable papers and articles on industrial, technical and educational subjects to the engineering and electrical periodicals and is the author of "Laboratory Notes for Electrical Engineering Students" which was published in 1916.

NISSIM, MEYER.

M.A.

One of the most active members of the Jewish community in Bombay. Born in 1882 he passed his M.A. examination at the age of 23. Became senior member of the firm of David Sassoon & Co. on the retirement of his father in 1908. Was chairman and director of the Sassoon Mills, the Union Mills and the Sassoon and Alliance Silk Mills and the Port Canning and Land Improvement Company. Member of the Millowners' Association, the Bombay Port Trust, and the Municipal Corporation. Was a director of the Bank of Bombay from 1912 to 1919 and President for 1916-17. Has travelled in Europe, America and China and has been taking an active part in the civic life of Bombay city. (P. 264.)

NOYCE, FRANK.

C.S.I., C.B.E., I.C.S.

President of the Textile Tariff Board which sat in Bombay in 1926. Mr. Noyce had exceptional opportunities of studying the industrial and agricultural conditions in various provinces in India. He was President of the Indian Sugar Committee, 1919-20 and of the Coal Committee, 1924-25. Born in 1874 and educated at St. Catherine College, Cambridge, he entered the Indian Civil Service in 1902. Was appointed Under

Secretary in 1908 in the Revenue Department of the Government of Madras and later on in the Agricultural Department of the Government of India. In 1917-18 he acted as Secretary to the Indian Cotton Committee and in the following year as Controller of Standard Cloth. Served on the Committee appointed to investigate the Land Revenue System, Burma, in 1920-21. Acted as Indian Trade Commissioner in London in 1923 and on his return to India in the same year he was appointed Secretary in the Development Department, Madras. Received the C.B.E. in 1919 and the C.S.I. in 1924. (Pp. 586 and 689.)

PANDAY, CAWOSJI DORABJI.

The doyen of mill managers in Bombay and still active as superintendent of the Manekji Petit group of mills. Mr. Panday is the nephew of Mr. Merwanji Framji Panday one of the pioneers of the mill industry and joint promoter of the Oriental Mill in 1860. Mr. Cawosji Panday joined the old Dharamsey Mill (now the Swadeshi) in 1878 as an apprentice after its management was taken over by Mr. Merwanji Panday in 1874. Here he did practical and theoretical work through all the departments and became assistant manager. In 1886 he secured the post of manager at the Coorla Mills where he served till 1896 and then accepted a better paid appointment as manager of the Sassoon Mills. This he resigned in 1899 and went on a tour in Europe visiting the spinning and manufacturing centres in Great Britain. Mr. Panday was welcomed and shown over the large textile machinery works in Lancashire and returning to Bombay in 1900 he accepted the post of consulting manager at five different mills including the State cotton mill at Baroda. The work, however, involved too much fatigue and in 1906 Mr. Panday joined the Emperor Edward Mill as manager. The higher post of manager of the Manekji Petit Mill was offered and accepted by him in 1913. Here his long experience and merits were recognised and he was made superintendent of all the four mills under the agency of D. M. Petit & Sons which position he is still holding. In addition to being an experienced and successful manager Mr. Panday has devoted his time and resources to the education and betterment of carding, spinning and weaving masters who have not had the advantage of higher literary training or technical education. The good work done by him by extending the scope of the Bombay Textile and Engineering Association has been well known and appreciated by millowners, managers and other overlookers. Quiet and unassuming he has given his best for the enlightenment of his professional colleagues, while apprentices and assistants have found in him a sympathetic and willing helper. Mr. Panday will celebrate the golden jubilee of his career in the textile industry in January 1928—a period of full fifty years—and when he enters on his well-earned retirement he will have the satisfaction of having spent the longest period of a mill manager's life in an industry in which his uncle and father worked as pioneers and which he had the good fortune to witness up to the zenith of its prosperity. (P. 295, 666.)

The Late
PANDAY, DORABJI FRAMJI.

Brother of Mr. Merwanji Framji Panday and father of Mr. Cawosji D. Panday, present superintendent of the mills under the agency of Messrs. D. M. Petit & Sons. Mr. Dorabji Panday had been connected with the mill industry since 1870 and assisted his brother in the management of the Oriental Mill and the Dharamsey Punjabhoy Mill and in the banking and commercial undertakings in which the latter was interested. Born 1828, died 1890. (P. 249.)

The Late
PANDAY, MERWANJI FRAMJI.

One of the pioneers of the mill industry in Bombay and joint promoter of the Oriental Mills and the Manekji Petit Mills. An enterprising and respected member of the Parsi community. Was associated as broker with the firms of Comber & Sons, Cambell Mitchell & Co., and Jafferson Cantrell & Co. Started the Imperial Banking and Trading Company in 1864 and the Bombay Press Company, the East India Press Company and other pressing and ginning companies. He also took over the agency of the Dharamsey Punjabhoy Mill at Coorla and considerably improved its working, as described on page 27. A kind and generous-hearted citizen, his death caused general regret in Bombay and especially among the members of the Parsi community for whom he had established Dharmasalas and Convalescent Homes. Born 1812; died 1876. (P. 11.)

PAREKH, MANGALDAS G.

One of the most prominent of Ahmedabad millowners and joint Agent of the Jubilee Mill and the Victoria Mill in Bombay, the latter of which he purchased in 1913 in partnership with Mr. H. M. Mehta. Mr. Parekh has been an active worker on the committee of the Ahmedabad Millowners' Association of which he has also been Chairman. Has taken an intelligent part in all questions affecting the interest of the mill industry.

The Late

PATEL, PESTONJI DHUNJIBHOY.

Founder of the firm of "Patel Brothers," cotton brokers and commission agents, who now rank among the largest in the cotton trade of Bombay. Mr. Patel enjoyed a high reputation as a cotton merchant and dealer, and formed a private joint stock company in 1923 in partnership with E. D. Sassoon & Co., Ltd., under the style of "The Patel Cotton Co., Ltd.," with a capital of Rs. 50,00,000 which took up all the ready and export business of "Patel Brothers" who reverted to their former business of cotton brokers and commission agents. In 1923 Mr. P. D. Patel was elected a member of the New York Cotton Exchange, an honour which had not until then been bestowed upon any other Indian. His sudden death in February 1924 deprived the mercantile community of an enterprising and energetic colleague who had contributed substantially towards the development of the cotton trade of this Presidency. (Pp. 605, 606.)

PATEL, RUSTOMJI DHUNJIBHOY.

Became Managing Director of "the Patel Cotton Co., Ltd.," on the death of his brother Mr. P. D. Patel in 1924 while the New York Cotton Exchange elected him a member of their Association. Mr. R. D. Patel is an Associate Member of the Liverpool Cotton Exchange, and an active worker in the Bombay business with the sons of his deceased brother.

PATON, FREDERICK NOEL.

Secretary of the Bombay Chamber of Commerce and the Millowners' Association till 1905 when he was appointed Director General of Commercial Intelligence, Calcutta. Second son of the late Sir Noel Paton, LL.D., Her Majesty's Limner for Scotland. Born in Scotland he moved to London in 1882, and was trained as an artist. Worked for some years as an illustrator, and his work in Harper's Magazine and other illustrated periodicals attracted a good deal of attention. He also furnished figure illustrations for various books. Drifted more and more towards literature contributing to Blackwood and other leading magazines. Edited Chaucer for the Canterbury Poets Series, and found a publisher in Blackwood for a novel which he brought out in 1869 and which went through four editions. Became English Secretary in the Turkish Embassy in London where he acquired official experience and a knowledge of modern languages which he cultivated. Some years later he became Secretary to Sir Edgar Vincent, K.C.M.G. (M.P. for Exeter), and Director-General of the Imperial Ottoman Bank at Constantinople. Travelled much in Europe, Egypt, Asia Minor and Arabia, and was employed to report on various financial and industrial projects. Came to India in 1894 on a mission to the Government of Bombay in connection with the Contraband on the Aden-Arabian Frontier. Again came to Bombay in 1895 as an assistant under Mr. John Marshall, then secretary to the Bombay Chamber of Commerce and the Millowners' Association. On the death of Mr. Marshall in 1898 he was appointed secretary of both. (P. 532.)

PAYMASTER, ARDESHIR BURJORJI.

Mr. Paymaster has been very intimately connected with the cotton trade of the Bombay Presidency for nearly half a century. Commencing life as an assistant under Cuddum & Co. in 1881, he acquired considerable experience in the grading and selection of the different varieties of cotton. Also visited the cotton-growing districts in the various provinces of India and the experience and knowledge thus gained entitled him to be recognised as one of the oldest among the cotton experts in this city. In 1898 he joined the firm of Mitsui Bussan Kaisha, Ltd., as cotton selector and supervisor of cotton shipments to Japan and is now acting as joint cotton broker to the Toyo Menka Kaisha, Ltd., with Mr. Anandilal Podar. (Pp. 605, 606.)

The Late

PEERBHOY, SIR ADAMJI, Kt.

One of the most enterprising members of the Dawdi Bohra community. Born in 1840 at Dhoraji of poor parents he came to Bombay at the age of 17 as a petty trader. Worked his way up from a tent-maker to the grade of the largest military and Government contractor in the line. Started tanneries and harness factories and ranked among the prosperous merchants of his time giving liberally towards the relief of distress and for public charities. Appointed Sheriff of Bombay for 1897. Started the Matheran Steam Railway in 1905, the first to be projected under private enterprise. Purchased the Oriental Cotton Mill at Tardeo in 1898 which was worked for a time under the title of the Adamji Peerbhoy Mills but was sold after his death in 1913. (P. 248.)

The Late

PETIT, NUSSERWANJI MANOCKJI.

Brother of Sir Dinshaw Petit (Bart.). Took an active part in the management of the Oriental Mills which flourished under his management and induced capitalists to project more cotton mills in Bombay and Ahmedabad. Mr. Nusserwanji Petit gave large sums in charity and established an Orphanage in Bombay for Parsi children where the latter are taught carpentry, bamboo work and other useful handicraft. Born in 1820; died in 1891. (P. 17.)

The Late

PETIT, MANEKJI NUSSERWANJEE.

Father of Sir Dinshaw Petit, the First Baronet, and one of the pioneers of the mill industry he having established the Oriental Mill in 1858 after Mr. Cawosji Daver had started the Bombay Spinning Mill in 1854. Born in 1802 Mr. Manekji Petit began his business career at the early age of 18 by voyaging to the Arabian ports and then acting as broker to English firms in Bombay. He also traded on his own account and gained a high position in the mercantile community. He was one of the projectors of the Colaba Land Company, the Colaba Press Company, and owned the large merchant vessel *Charles Grant* of 2,000 tons, which sailed between India and China. Born 1802; died 1859. (P. 11.)

The Late

PETIT, SIR DINSHAW MANEKJI

(First Baronet).

One of the pioneers of the mill industry in Bombay. Took an active part in the rise and progress of the trades and industries of the Presidency. Projected the Manekji Petit Mill in 1860 and subsequently the Dinshaw Petit, the Victoria, the Framji Petit and the Gordon Mills. Was the first to introduce the manufacture of sewing thread, hosiery and fancy weaving and dyeing in Bombay. One of the founders of the Victoria Jubilee Technical Institute, towards the building of which he contributed Rs. 3 lakhs. Appointed Sheriff of Bombay for 1886 and nominated on the Viceroy's Council in 1887. Was a member of the Bombay Corporation, and a director of the Bank of Bombay and other financial and industrial concerns. Was a member of the Bombay Chamber of Commerce and the Millowners' Association, being elected Chairman of the latter Association for 14 consecutive years from 1879 to 1892. Appointed Fellow of the Bombay University in 1888. For his various public services and benefactions he received the Knighthood in 1887 and was created a Baronet in 1890. Born 1823; died 1901. (P. 95.)

PETIT, SIR DINSHAW MANEKJI

(Second Baronet).

Born in 1873 he succeeded to the title on the death of his grand-father, Sir Dinshaw Manekji Petit, in 1901, his father having pre-deceased him. A member for a short period of the Bombay Legislative Council in former years. Director of the Manekji Petit Mill Co. and the Framji Petit Mill. Member of the Municipal Corporation and Chairman of several charitable institutions for Parsis. (P. 96.)

The Late

PETIT, FRAMJI DINSHAW.

Born in 1843 Mr. Framji Petit was the second son of Sir Dinshaw Petit, Baronet, and was esteemed by all classes for his generosity and courtesy. Actively assisted his father in his industrial and financial undertakings and philanthropic work. Travelled over Europe, America, China and Japan between 1881 and 1887 and published an account of the tours in book form. Predeceased his father in 1895 at the early age of 39, his death being mourned by the members of the various communities of Bombay who had gathered in a mass meeting and offered prayers for his recovery. (P. 94.)

The Late

PETIT, BOMANJI DINSHAW.

Had been connected with the mills under the agency of Sir Dinshaw Petit for 30 years and was director of several other joint stock companies. Was a director of the Bank of Bombay and its President for 1903; also President of the Bombay Millowners' Association for the same year. Nominated by Government in 1899 to a seat on the Bombay Legislative Council and in 1901 was appointed one of their representatives on the City Improvement Trust. Was a member of the Board of the Victoria Jubilee Technical Institute as representative of the Millowners' Association. Endowed Rs. 7,00,000 towards the establishment of a special hospital for Parsis and gave an equal amount in other directions. Born 1859; died 1915. (P. 94.)

PETIT, JEHANGIR BOMANJI.

Agent and director of the Manekji Petit and the Framji Petit Mill companies. Member of the Municipal Corporation, the City Improvement Trust and the Development Board. Member of the Millowners' Association and its President for 1915-16 and President of the Indian Merchants' Chamber for 1919-20 and of the Indian Industrial Conference for 1918. Vice-President of the Bombay Presidency Association and President of the Bombay Textile and Engineering Association. Was a member of the Excise Committee 1921-24, Indigenous Industries Committee 1915-17, Industrial Disputes Committee 1921, University Reform Committee 1924. Member of the V. J. T. Institute and member of the Legislative Council for 1921-23 and from 1927. President of the Indian Economic Society, the Tariff Reform League, and the Landlords' Association. Founder of the *Indian Daily Mail*. (P. 96.)

PETIT, DHUNJIBHOY BOMENJI.

Grandson of Sir Dinshaw Petit, the First Baronet, and managing agent and director of the Emperor Edward Mill. (P. 264.)

PETIT, COWASJEE HORMUSJEE,

B.A.

The only descendant of Sir Dinshaw Petit (First Baronet) who has received technical training as a mill manager. Born in Bombay in 1893 Mr. C. H. Petit graduated in Arts from the Elphinstone College in 1918 and joined the Bomenji Petit Mill as apprentice and worked from the mixing to the spinning department. Went over to the Manekji Petit Mill in 1920 and obtained experience of its extensive departments till 1922, attending at the same time to the selection and purchase of mill stores and accessories of the three mills of the Manekji Petit Mill Company. Went to Manchester in 1922 and joined the College of Technology where he obtained exemption for the first year and took a special course in "Textile Industries" for the second and third year. He also specialised in weaving and worked at various loom sheds in the Lancashire district. Returning to Bombay in 1924 he rejoined the firm of D. M. Petit & Sons and is now joint superintendent of the Petit group of mills with Mr. Cowasji D. Panday. Mr. Cowasji Petit thus combines educational qualifications as a Graduate in Arts with practical and theoretical knowledge and experience of cotton spinning and weaving, and mill management in general. (P. 673.)

POCHKHANAWALA, SORABJI NUSSERWANJI.

One of the most progressive of Indian bankers and the principal founder of the Central Bank of India, Ltd., of which he is Managing Director. Served the Chartered Bank of India, Australia and China till 1906 as Assistant and the Bank of India as Assistant Accountant till 1911 when he projected the Central Bank of India, which now occupies a leading position among Indian Banking concerns. Elected Certified Associate of the Institute of Bankers, London, in 1910, and was appointed member of the Government Securities Rehabilitation Committee by the Government of India in 1921. A recognised authority on Indian banking and finance. (Pp. 685, 686.)

PODAR, ANANDILAL.

Partner in the firm of Anandilal Podar & Co., cotton brokers to the Toyo Menka Kaisha Ltd. Mr. Podar is also a member of the Japanese Syndicate which purchased the Diamond Mill in 1926 and converted it into the Toyo Podar Mill, Ltd., the first undertaking of its kind in India. He is the first Indian to associate with the Japanese in promoting and working a cotton mill in this country. (Pp. 597, 607, 606.)

The Late PREMCHAND ROYCHAND.

The most enterprising financier during the boom period of 1860-63 and the leading broker of his time. Enjoyed the confidence of investors and speculators to an amazing extent and made large fortunes in various undertakings. Despite heavy losses during the share *mania* crisis in 1865 Mr. Premchand Roychand kept up his coolness and wonderful capacity for financial operations. Gave large sums in charity and was the most prominent personality in the banking circles and the commercial life of Bombay until his death in 1900. (P. 685.)

PROCTER, SIR HENRY, Kt.

Partner in the firm of Killick Nixon & Co. and a prominent member of the commercial community in Bombay. Took an active part in the development of Feeder Railways in the Bombay Presidency. Member of the Legislative Council, the Bombay Port Trust, the Millowners' Association and the Chamber of Commerce of which latter body he was Chairman for 1906 and 1908. Agent and director of the Kohinoor Mill, the Bombay Steam Navigation Company and other industrial concerns. President of the Y.M.C.A. and the Industrial Mission Aid Society and other public institutions. Received the honour of Knighthood in 1911. Retired in 1926. (P. 534.)

RAHIMTOOLA, SIR IBRAHIM, Kt.

K.C.S.I., C.I.E.

Sir Ibrahim Rahimtoola is an enlightened and useful member of the Mahomedan community and a zealous worker in the cause of local self-government. Has been connected as director with several joint stock cotton mill companies and industrial and financial undertakings. Born in 1862 and educated in Bombay he started an export and import business under the style of Rahimtoola Kaderbhoy & Co. Has been a member of the Bombay Improvement Trust and an active worker on the Municipal Corporation of which he was elected President in 1899, being Chairman of the Standing Committee for 1898. A staunch advocate of free and compulsory primary education he has taken an active part in the social and educational progress of his community. Was nominated a member on the Legislative Council in 1899 and was appointed Sheriff of Bombay for 1904. Has been a member of the Imperial Council, of the Executive Council of the Governor of Bombay and President of the Bombay Legislative Council from 1923 to 1926. (P. 255.)

RAMJI, THE HON. SIR MUNMOHANDAS, Kt.

A prominent merchant, millowner and public-spirited citizen. Born in 1857 and educated in Bombay. Twice elected member of the Council of State in 1925. Founder of the Indian Merchants' Chamber and its President from 1907 to 1913 and again in 1924. Member of the Committee of the Millowners' Association for more than 25 years and its President for 1909. President of the Native Piecegoods Merchants' Association for more than 30 years. Served for several periods on the Board of the Bombay Port Trust and is at present a member. Member of the Board of Trustees of the Victoria Jubilee Technical Institute for a number of years. A member of the Advisory Committe of the B. B. & C. I. Railway. Represented the Indian commercial community in the old Bombay Legislative Council from 1910 to 1920, and the Indian Merchants' Chamber on the Legislative Assembly from 1921-23. Served on the Municipal Corporation for 18 years and elected President for 1912-13. Was a member of the Advisory Committee to the Director of Industries and of the Advisory Board to the Development Department. Served on the Braithwaite Committee, Railway Risk Note Committee and the Income-tax Committee. (P. 131.)

REED, SIR STANLEY, Kt.

K.B.E., LL.D.

Born in Bristol in 1872. Sir Stanley Reed joined the editorial staff of the *Times of India* in 1897, and acted as Chief Editor from 1907 to 1923. Was appointed special correspondent for this paper and the *Daily Chronicle* and visited the districts affected by the famine of 1900. Compiled the official history of the Prince of Wales' tour in India in 1905-06 and the account of the visit to this country of the Amir of Afghanistan in 1907. Editor of the *Indian Year Book* which deals with the statistical and historical account of the Indian Empire. Was Chairman of the Industrial Disputes Committee in 1920. Fellow of the Bombay University. Commander of the Bombay Light Horse. Was director of some of the most successful of joint stock companies and public utility concerns in Bombay. Retired in 1923. (P. 682.)

The Late

REID, WILLIAM.

Came to Bombay in 1880 and started the Bombay Dye Works with Sir Dinshaw Petit (First Baronet) and Mr. N. N. Wadia, C.I.E. Mr. Reid remained connected with these works till his death in 1905.

RITCHIE, FRANK.

Superintendent of the P. & O. S. N. Co.'s office in Bombay from 1900 to 1907. Had been connected with the Company since 1879 and had served in the London office and subsequently in Italy, China, the Straits Settlement, Australian Colonies and at Calcutta. In Bombay Mr. Ritchie was a member of the Chamber of Commerce, a Trustee of the Port of Bombay, and took part in the commercial life of the city. He also took a lively interest in the war of freights in 1894-95 between the P. & O. Co. and the Tata Line of steamers for carrying cotton and yarn to China and Japan. After the death of Mr. Jamsetji Tata Mr. Ritchie wrote to a friend in Bombay as under:—"The old gentleman died before some of his greater dreams were fulfilled but his descendants will reap the benefit of his foresight." Mr. Ritchie was called Home to the Head Office of the P. & O. Company in 1906 and in 1913 he was made managing director of the Company. (P. 689.)

The Late

ROSCOE, ROBERT.

Was the technical expert and adviser of Mr. Jamsetji Tata at the Empress Mill from 1880 to 1896. Mr. Roscoe was one of the most competent of Lancashire men who had come out to India during the early years of the mill industry. His services were availed of by Messrs. Tata for the Swadeshi Mill and other Bombay concerns where his superior knowledge of cotton machinery and especially the Ring Frame and the Revolving Flat Cards proved of the greatest value. Was a contributor to the columns of the *Indian Textile Journal* in which his practical knowledge of cotton manufacture was disseminated to the best advantage for the benefit of apprentices, overlookers and managers. Few mill managers have been able to impart in writing their knowledge of mill machinery and the processes of manufacture with a clearness of style and mastery over details as Mr. Roscoe did. Died in 1896.

The Late

RUTNAGUR, MUNCHERJI C.

Mr. Rutnagur was the earliest of mill managers to be appointed from the educated section of citizens in Bombay. Became general supervisor of the Alexandra Mill in 1872 and manager in 1875. He also supervised the erection of the Nursey Mills in 1876 and was appointed its manager in 1877. His literary qualifications and taste for reading and study kept him in touch with the improvements in textile machinery and processes and his advice and opinion were sought by mill promoters, directors and agents. Left the Alexandra Mill and became manager of the Bombay United Mill in 1880. Joined the firm of

Moolji Jaitha & Co. in 1882 as manager of the Soondardas Mill and also acted as adviser for the Madras United Mills and the Khandesh Mills. At his advice the Agents of the Soondardas Mill were the first to introduce the Ring Frame and the Revolving Flat Cards on a large scale in Bombay in 1884 and the successful working of the machines induced other millowners to discard the Fly Throstle and the Roller Cards. Mr. Rutnagur was also the first to introduce automatic sprinklers and a plant for manufacturing healds and reeds in Bombay. He retired from active work in 1888 and died in 1898. (P. 670.)

SAKLATVALA, NAVROJI BAPUJI, C.I.E.

Born in 1875 and graduated from St. Xavier's College. Has done good work for the labouring classes and personally looked after the welfare work for the Tata mills. An active member of the Millowners Association and its President for 1916. Member of the Smoke Nuisances Commission and the Cotton Contract Board. Intimately acquainted with the working of the mill industry and the millhands. Was elected member of the Legislative Assembly in 1922 as a representative of the Bombay Millowners' Association. Represented the Government of India as the employers' delegate at the International Labour Conference held at Geneva in 1921. Has been actively connected with the house of Tatas in the formation and working of the Tata Iron and Steel Co., the Hydro-Electric Power Supply Co. and other undertakings. Member of the Port Trust, Bombay. (P. 258.)

SAKLATVALA, SORABJI BORABJI.

Member of the firm of Tata Sons, Ltd., and one of the few technically trained mill agents and directors of cotton mills in Bombay. Born in 1879 Mr. Saklatvala graduated in Arts from St. Xavier's College in 1900, winning the Sir George Le Grand Jacob University Prize in 1902. Became graduate apprentice in the same year at the Swadeshi Mills on the usual terms, and was transferred to the Ahmedabad Advance Mills in 1903. Acted as assistant manager at the Empress Mills, Nagpur, under Sir Dorabji Dadabhoy from 1907 to 1910 when he was transferred to the Head Office of Tata Sons in Bombay in charge of the Mills Department holding a Power of Attorney from the firm. Is now a director of the mill companies under Messrs. Tata's agency and has taken an intelligent and active part in the affairs of the Millowners' Association, being elected its President for 1924. In this capacity his practical knowledge of mill management and the experience gained in the administration of the Tata concerns proved of considerable value to the millowners. (P. 269.)

SAKLATVALA, BAPUJI H.

Mr. Saklatvala is one of the oldest weaving masters now on the retired list. Was apprenticed at the New Great Eastern Mill of which his father, Mr. Hormasji Saklatvala (page), was a director. Acted as weaving master of the same concern from 1870 to 1882, and then served the firm of D. M. Petit & Sons at the Mazagon Mill, the Currimji Petit Mill and acted as manager at the Tousiwadi Petit Mill and the Hyderabad Deccan Spinning Mill. Retired in 1911, having spent 35 years in the cotton mills, where his extended experience and organising powers proved of considerable value. (P. 266.)

The Late
SAKLATVALA, HORMUSJEE NAOROJI.

A prominent merchant of his time who traded with the East and went to China in 1860 with Mr. Jamsetji Tata who opened the firm of "Jamsetji and Ardeshir" in Hongkong. Was associated for a time with Mr. Muncherji N. Banaji in the management of the New Great Eastern Mills. He was also connected with the Mahalaxmy Mill which was taken over by Mr. Morarji Goculdas. Was a member of the Municipal Corporation for the city of Bombay and director of ginning and pressing factories. Born 1834, died 1882. (P. 240.)

The Late
SASSOON, SIR JACOB (Baronet).

One of the wealthiest members of the Jewish community and the largest cotton millowner in Bombay. Projected the Jacob Sassoon Mills in 1893, the largest spinning and weaving factory in India. Traded extensively with China and Japan as partner with his brother, Sir Edward Sassoon, Baronet, in the firm of E. D. Sassoon & Co. Contributed liberally towards the establishment of the Sassoon Hospital in Poona and for a Free School for Jewish children in Bombay. Endowed the sum of Rs. 10 lakhs in 1908 for a Central Institute for Scientific Instruction and gave large sums for charitable purposes. Died in 1916. (P. 205.)

SASSOON, SIR VICTOR.
(Third Baronet.)

Senior partner in the firm of E. D. Sassoon & Co., Ltd., who are managing agents for the largest number of spindles and looms in the whole of India. Born in 1881 he graduated from the Trinity College, Cambridge, and served as Captain during the war of 1914-18 in the Royal Artillery Force and was wounded in action. Succeeded to the Baronetcy on

the death of his father Sir Edward Sassoon in 1924 and is now Chairman in E. D. Sassoon & Co., Ltd. Takes an active part in all important questions affecting the economic conditions of the textile and allied industries. Elected on the Legislative Assembly in 1920 and 1926 by the Mill-owners' Association, Bombay.

SASAKURA, T.

Bombay manager of Toyo Menka Kaisha Ltd., and intimately associated with the cotton trade of Bombay. Mr. Sasakura was the principal member of the Japanese syndicate that purchased the Diamond Mill in Bombay in 1926 and converted it into the Toyo Podar Mill. He is now managing director of the mill (*see* pages 597 and 600 to 602).

The Late SASSOON, DAVID.

Founder of the firm of David Sassoon & Co., one of the wealthiest and oldest of Jewish business houses in Bombay. Endowed the Sassoon Mechanics Institute as a library and lecturing hall in the interest of mechanics and artizans. His eldest son Elias David Sassoon was the first member of the Jewish community in India to be interested in the cotton mill industry having joined the Board of the Oriental Mill, the first joint stock concern to be started in 1860 on the agency system. Born 1792; died 1864. (P. 15.)

SAWYER, H. H.

Manager of the Bombay branch of David Sassoon & Co., Ltd., since 1919. Born in 1880 Mr. Sawyer began his business career in 1899 at the London office of this firm and took charge of the Karachi branch in 1904. Since his transfer to the Bombay office Mr. Sawyer has acted as Chairman of the Sassoon and Alliance Silk Mill, the Sassoon Spinning & Weaving Mill, the Union Mill and the Port Canning Land Improvement Co. Was a director of the Bank of Bombay and now holds a seat on the local Board of the Imperial Bank of India. Is also a member of the Committee of the Millowners' Association. (P. 213.)

SHAPURJEE SORABJEE.

M.I. MECH.E., ASSOC. M. INST. C.E.

Was owner of "Bombay Foundry and Iron Works," the pioneer factory of its kind in the Presidency and has been well known as an engineer and machinery agent. Born in Bombay in 1863 he matriculated in 1879, and entered the works of Hick Hargreaves & Co., Ltd., Bolton, as apprentice in 1884. Studied also at the Owens College, being the first Indian to enter this college for engineering. Won the Ashbury Scholarship and gained First Class Honours in mechanical engineering at the City and Guilds of London Institute. Was enrolled in 1887 as a M. I. Mech. E., and Assoc. M. Inst. C. E. Was presented at the Court of the late Queen Victoria in 1887 by the then Secretary of State for India. Started the Globe Mills in 1896 and transferred the agency for valuable consideration in 1913. Mr. Shapurji Sorabji is an experienced engineer and is now senior partner in Sorabji Shapurji & Co., Ltd., which represented the firms of Brooks & Doxey and John Musgrave & Sons till the latter started their own offices in Bombay in 1920. (Pp. 648, 671.)

SHALLIS, F. W.

One of the pioneers of hydraulic baling presses in India. Arrived in Bombay in 1873 and became connected with more than 70 per cent. of the pressing factories in the country. Represented the West Patent Press Co. of London and erected several cotton presses between 1875 and 1884. Started a business of his own in 1879 as agent for Nasmyth Wilson & Co. and Greenwood & Batley which was turned into "Shallis & Duncan" in 1899. Introduced the Anglo-American System of oil mill machinery in India. Retired in 1901.

SETHNA, HON. SIR PHIROZE, Kt. O.B.E.

A citizen with many-sided activities, Sir Phiroze Sethna has rendered valuable services in various directions. Born in 1866 he has been a prominent member of the mercantile community—identifying himself with insurance companies, banking institutions and a large number of cotton mill companies and other joint stock concerns. Has been President of the Indian Merchants' Chamber, Chairman of the Central Bank of India, a member of the Bombay Port Trust and the City Improvement Trust and has been closely associated with the municipal administration of the city as a member of the Corporation since 1907 and Chairman of the Standing Committee for 1911 and President for 1915. Was joint Secretary of the Exhibition of Old Bombay held in 1911 during the visit of His Majesty the King-Emperor. Has been Honorary Treasurer of the public funds started on important occasions such as H.R.H. The Duke of Connaught Reception Fund, H.R.H. The Prince of Wales Reception Fund and the fund in connection with the Children's League. Was closely associated with the Women's Branch of the Bombay Presidency War and Relief Fund as Secretary and in other capacities. In the restricted list for special recognition for war-time services submitted by the Commander-in-Chief in 1919 was the name of only one Indian, *viz.*, Sir Phiroze Sethna, among the ten citizens selected from the Bombay Presidency. Was a member of the Skeen

Committee and accompanied the South African Delegation as one of the representatives of the Government of India in 1926. Was nominated member of the Bombay Legislative Council in 1916 and elected on the Council of State since the Reformed Constitution in 1921. Received the Order of the British Empire in 1919 and the Knighthood in 1926. (P. 277.)

SHROFF, K. R. P.

One of the leading share and exchange brokers in Bombay and President of the "*Native Share and Stock Brokers' Association*" since 1923. Born in 1878 and educated at the Bharda New High School Mr. Shroff passed out of the Byramjee Jeejeebhoy College of Commerce. Conducted tuition classes for the matriculation and previous examinations. Made mathematics his speciality and has published books on Arithmetic and Algebra. Joined in 1903 the stock exchange business of R. P. Shroff and Sons which was founded by his father, and extended and brought it to a flourishing position with his brother. Mr. Shroff's influence as a broker increased considerably and he was elected a director of the "*Native Share and Stock Brokers' Association*" in 1919, its Secretary and Treasurer in 1922 and President in 1923. He managed the latter post with success and has been re-elected thrice and still continues as President having worked hard and loyally in the best interests of the Association. (P. 685.)

The Late
SOONDERDAS MOOLJI.

Son of the well-known Bhatia merchant Mr. Mooljl Jaitha who founded the firm of Mooljee Jaitha & Co. in 1873 and which has continued to hold a prominent position among the Indian commercial houses in the Presidency. Mr. Soonderdas was born in 1830 and was a shrewd, far-sighted merchant and started the Soonderdas Mill in Bombay, the Jalgaon Mill at Khandesh and the Madras United Mill at Madras at the early stage of the textile industry, *viz.*, 1872-74. He also projected ginning and pressing factories at Berar, Murtizapur, Akola and Khandesh and opened out an extensive trade with Cochin in cocoanut oil. He owned native craft and sailing ships and was the leading cotton merchant of his time. His enterprising and successful career was however cut short by death in 1875 at the early age of 39.

SORABJI PALONJI.

From an assistant auditor in the office of the Examiner of Commissariat Accounts, Poona, Mr. Sorabji Palonji rose to the post of secretary of the Indo-China Mill and the Diamond Mill now converted into Birla Mills Nos. 1 and 2. Also worked under Col. Britton, the Census Officer for 1880, Poona, and joined the City of Bombay Mill in 1882 as an assistant in the firm of the managing agents. Is now the secretary of the Birla Mills under the agency of Allana Rehimtoola & Co. (P. 296.)

The Late
SORABJI SHAPURJI.

The pioneer in establishing the first engineering works and foundry in the Bombay Presidency. Was employed as a foreman in the Military Gun Factory in Bombay and went to England in 1850 and brought out the plant and machinery for a factory which he started in 1852 under the style of the "Bombay Foundry and Iron Works." He was also the first to put up in Bombay a flour mill and the first cotton cleaning and wool burrying factory and a plant for manufacturing cast iron pipes. These ventures proved successful and led the way for further and more extended undertakings of the same kind by other capitalists. Mr. Sorabji Shapurji died in 1869 leaving the business in the hands of his successors. (Pp. 671, 672.)

SUTER, DR. M.
D. SC.

Intimately connected with the development of the German dyes and colour industry in Bombay since 1906; took part in the training of apprentices and overlookers in the technology of dyeing at various mills in India principally for the introduction of Sulphur, Vat and other fast dyes. Born in Lyons, France, in 1879. Obtained the Diploma of the Polytechnical College in Zurich and degree of D.Sc. for research work in chemistry at the University of Geneva. Worked as a colourist with the Badische Anilin & Soda Fabrik, Ludwigshafen on Rhine, Germany, from 1904-1906 with special opportunities for studying the dyeing of Turkey Red, Indigo and Vat Colours during periods of practical work in prominent dye-houses in Germany. Served as Technical Adviser to M. Ostermayer & Co., and their successors the Badische Anilin & Soda-Fabrik, Bombay, from 1906 till 1915 when he liquidated the latter concern on account of the war. Remained partner in the firm of Maurice Suter & Co. from 1920 to 1926 when he was appointed joint manager in the Aniline department of the Havero Trading Co., Ltd., Bombay.

The Late

TATA, JAMSETJI NUSSERWANJI.

India's greatest merchant, millowner and industrialist. Born in 1839 at Navsari he was educated at the Elphinstone College, Bombay, and joined his father's office at the age of 19. While Jamsetji Tata's interests were centred in Bombay he worked for the whole country and did more for its industrial regeneration than any other Indian. Went to China in 1859 and also travelled over practically every country in the world including Great Britain, the Continent, the United States of America, China and Japan. Founded the firm of Tata & Co. in Bombay in 1871 and opened out branches at London, Hongkong, Shanghai, Yokohama, Kobe, Pekin, Paris, New York and other centres. Purchased the Chinchpogly Oil Mill in Bombay and converted it into the Alexandra Spinning and Weaving Mill in 1886. Projected the Empress Mills at Nagpur in 1877 and worked it on the most approved lines introducing for the first time the Agency commission on profits instead of on production. Was the pioneer of the ring system of spinning in India and was the first to start medical relief and welfare work for mill operatives. Purchased the old Dharamsey Mills at Kurla from the liquidator in 1887. (*vide* page 27) and renovated it with new machinery and it has worked since 1890 as one of the most prosperous of joint stock concerns in the Presidency. Was the pioneer in growing Egyptian cotton and in spinning finer counts and finer fabrics.

Endowed Rs. 30 lakhs for the Research University at Bangalore for giving first class scientific education to Indian youths and developing the indigenous resources of the country. Endowed scholarships for Indians studying in England for the higher Administrative and Technical services. Introduced the silk industry in Mysore after the Japanese method and secured licences from Government for working iron mines in the Central Provinces. Initiated schemes for the manufacture of iron and steel in India and the utilisation of the water power near Bombay for the electrical driving of the cotton mills. These were the greatest of Mr. Jamsetji Tata's schemes and the largest undertakings of their kind in India. He, however, did not live to see them completed, his death taking place in May 1904 at Nauheim at the age of 65. Mr. Jamsetji Tata did more for the development of India's raw products and its indigenous resources than any other Indian of modern times. Born 1839; died 1904. (Pp. 11, 47, 73, 559.)

The Late

TATA, R. D.

Partner and active worker in the firm of Tata Sons & Co., Ltd. Educated at the Elphinstone College, Bombay; he went in for the study of agriculture at Madras. He was, however, invited by Mr. Jamsetji Tata to join him in 1884 and since then visited China and America in the interest of the firm. Was the first to introduce Indian cotton into Japan for the cotton mills started in that country. Co-operated whole-heartedly and ably with Sir Dorabji Tata in carrying out the various schemes initiated by Mr. Jamsetji Tata and was highly esteemed in the East for his share in the development of Indo-Japanese trade relations. (Pp. 74, 598, 599.)

TATA, SIR DORABJI JAMSETJI, Kt.

Sir Dorabji Tata has successfully carried through the great schemes initiated by his father for the development of India's indigenous resources and the furtherance of her industrial prosperity. Born in 1859 Sir Dorabji was sent to England in 1875 and received his education at Cambridge, matriculating from Cains College in 1877. Returning to Bombay in 1879 he entered St. Xavier's College from which he graduated in 1882. Spent two years in the editorial department of the *Bombay Gazette* and entered his father's firm and acquainted himself with the administrative work of the office and the routine of the cotton mills under Sir Bezonji Dadabhoy. The experience thus gained and the loyalty and devotion with which he worked up the business enabled him not only to take over the reins of government on the death of Mr. Jamsetji in 1904 but to expand the interests of the firm which formed several new companies in addition to the Iron and Steel Company and the Hydro-Electric Power Supply Company. Sir Dorabji also put through the educational scheme and the Indian Institute of Science was opened at Bangalore in 1914. The difficulties of floating the Hydro-Electric Works were also overcome by him and these and the Iron and Steel Works at Jamshedpur were established on a sound basis, the public supporting every new venture proposed by the great house of Tatas which has now become the largest organisation in India with branches and agencies in Rangoon and Calcutta and in London, Paris and New York. The Eastern business has also been extended with offices in Kobe and Shanghai and the patriotic desires and ambitions of Mr. Jamsetji Tata for the industrial regeneration of India have been fulfilled by the loyalty and devotion of his son. (Pp. 74, 559, 561, 562.)

The Late

TATA, SIR RATANJI JAMSETJI.

Second son of Mr. Jamsetji Tata and a partner in the firm of Tata Sons. Co-operated with his brother Sir Dorabji Tata in carrying on the schemes initiated by their father and continued the charities endowed by him. Born 1871; died 1918. (P. 74.)

THAKURDAS, SIR PURSHOTAMDAS, Kt.

C.I.E., C.B.E., M.L.A.

One of the most prominent and useful of Bombay citizens, born in 1876. Sir Purshotamdas has a record of substantial work in the furtherance of the trades and industries of this city, its finances and economic interests. Graduating from the Elphinstone College he became in time senior partner in the firm of Narandas Rajaram & Co., one of the leading cotton trading houses in the country. One of the founders of the Indian Merchants' Chamber and its President for 1923 and 1925, and represented the Chamber in the Legislative Assembly during the same years. Initiated and organised a joint deputation from the Indian and European commercial bodies which waited on the Viceroy in 1922 proposing a whole-hearted retrenchment in the expenditure of the Central Government. Has been an active member of the Bombay Cotton Exchange and the Bombay Cotton Trade Association and is President of the East India Cotton Association. Has taken considerable interest in the improvement of raw cotton and preventing adulteration and the misuse of transport facilities for purposes of admixture. It was due mainly to his efforts that the Cotton Transport Act was passed in 1923. Has been senior member of the Indian Central Cotton Committee and is on the governing body of the Plant Research Institute at Indore. As a member of the Bombay Legislative Council, in pre-war days, he was the only member who opposed the town duty of Rs. 1 per bale of cotton imported into Bombay and also condemned the principle of levying duties on the imports and exports of the city. Has served on the Indian Railway Committee in 1920, on the Incheape Committee in 1922, on the Atlay Committee in 1923. Is a member of the local Board of the Imperial Bank of India and as its President, he is also a Governor of the Bank. He is also connected as member or director with nearly 30 banking and industrial concerns and insurance companies. Has been a Trustee of the Bombay Port Trust since 1914 and was elected Vice-President of the Federation of Indian Chambers of Commerce for 1927. Was a member of the Royal Currency Commission in 1926 and his minute of dissent in favour of a 1s pence ratio gained considerable support from important commercial bodies and associations. Was a Government nominee on the Bombay Legislative Council in 1916 and Sheriff of Bombay for 1920. For his services in the relief of distress during the famine of 1911-12 he received the Kaisar-i-Hind Medal in 1913 and the M.B.E. in the first list of British Empire Honours in 1917 for meritorious work for the War Relief Fund. He again worked for the Famine Relief Fund in 1918-19 and was made a C.I.E. in 1919 and received the Knighthood in 1923. (P. 235.)

TSUKADA, K.

The first Bombay manager of Toyo Menka Kaisha, Ltd., which has been carrying on extensive business in cotton exports to Japan. (See pages 505 and 600 to 602.)

TURNER, ALFRED JOHN,

B.Sc. (LONDON), F.I.C.

Principal (since 1929) and Professor of Chemistry (since 1928) at the V. J. T. Institute, Bombay. Born in 1874 and educated at the Central Foundation School, London, and at the Finsbury Technical College under Professors Raphael Meldola, F.R.S., Silvanus Thompson, F.R.S., and John Perry, F.R.S., and at London University. Acted as assistant chemist for Burgoyne Burbidges; took part in the special enquiry into the water-supply of London which was held by the London County Council in 1895. Worked as assistant chemist under Doctors Moritz, Morris and Horace Brown (Brewing Chemists). Was lecturer in Chemistry at the East London Technical College and in Chemistry and Physics at the Giggleswick College, Yorkshire. Has acted as Examiner in Chemistry for the B.Sc. and Intermediate Examinations at the Bombay University, and as Chemical Adviser to the Department of Industries in the Bombay Presidency. Has read papers before the German and English Chemical Societies and prepared a monograph on Bitterns. (P. 370.)

VAKIL, KAPILRAM HARDEVRAM,

B.A. (BOMBAY), M.SC.TECH. (MANCH.), F.I.C., M.I.CHEM.E.

Industrial and chemical engineer possessing the highest qualifications and diplomas with honours from British Technological Institutes. Born in Surat in 1888 Mr. Vakil graduated from the Elphinstone College, Bombay, in 1906, joined the College of Technology, Manchester, and specialised in applied chemistry and obtained first class honours in dyeing, bleaching and in oils and fats. Appointed manager and consulting chemist for the Jamshed Oil Mill (Tata's) at Goorla, which was the first attempt to develop the cotton seed oil industry in India. On completion of the experimental work at this factory Mr. Vakil set up an independent consulting practice in Bombay till 1916 when he was the first Indian to be called for research work at the College of Technology, Manchester, during the war period. He was awarded the Manchester Corporation special Research Scholarship and on the completion of the work and in appreciation of his abilities he received the degree of Master of Technical

Science from the Manchester University and was admitted a member of the Institute of Chemistry. Received the offer for the Privy Council Research Scholarship to continue research work in Manchester and also offers from Lever Brothers to act as their consultant in the East and from Tata Sons to act as their chief consulting chemist in Bombay. Mr. Vakil accepted the last offer and was associated for several years with Messrs. Tata in the research investigation and prospecting of a large number of industrial and chemical problems for which he paid several visits to English, American, German and Continental works. Represented in 1921 the Indian Merchants' Chamber on the Technical Education Committee of the Government of Bombay under the Chairmanship of Sir M. M. Visveswaraya. In 1921 he investigated into and in 1923 carried out the project for the manufacture of alkalies in the Dharangadra State. He has thus done the pioneer work of establishing a key industry for India the cost of which has amounted to close upon Rs. 75 lakhs or £500,000. Mr. Vakil was the original discoverer of vegetable ghee products in India and set up, in 1921, the first vegetable (experimental) ghee factory in the country for Tata Sons, Ltd., at a cost of Rs. 3 lakhs. The process worked out by him is now in use in Holland for the manufacture of vegetable ghee which is largely imported into India. Mr. Vakil is also actively associated with the reconstruction of the Magnesium Chloride Works at Kharaghoda and the Okha Salt Works of which he is the managing agent. Has been the inventor and patentee of several processes for refining oils and fats one of which is now in practical operation in the United States of America, in Spain and in the Netherlands for the refining of fish oils. He has been the author of books and papers on the chemical industries of India and has helped the textile industry by publishing useful and instructive information on dyestuffs, sizing materials, lubricants, etc. As a member of the Committee of the Indian Merchants Chamber he represented that body on the Advisory Board of the Royal Institute of Science, Bombay. As a consulting engineer on industrial and chemical subjects and on new and improved processes of manufacture, Mr. Vakil ranks amongst the most distinguished engineers of his class in Europe and the Continent. He is a Fellow and Member of several Institutions in Great Britain including the Institute of Chemistry, the Chemical Society, Society of Public Analysts, Institution of Chemical Engineers and the Society of Chemical Industry. (Pp. 674, 675.)

The Late
VIRCHAND DIPCHAND, C.I.E.

An enlightened member of the Jain community, who rendered valuable services during the famine in the Sholapur District in 1898. Was a warm advocate of female education and gave liberally towards the relief of distress and suffering. Was connected with the firm of Morarji Goculdas & Co. Died in 1908. (P. 17.)

The Late
SIR VITHALDAS THAKERSEY, Kt.

A citizen of exceptional business abilities, philanthropic tendencies and enterprising spirit. Born in 1873 he came into early prominence as a useful citizen. Was elected member of the Bombay Corporation in 1898 and became Chairman of the Standing Committee in 1904 and President in 1907. Here his experience and knowledge of the requirements of the town and its people proved of the greatest value. Was a member of the City Improvement Trust and a nominated member of the Bombay Legislative Council from 1903 to 1910 and obtained a seat in the Imperial Legislative Council from 1910 to 1915. Took an active interest in the Industrial Exhibition held in 1904 in connection with the session of the Indian National Congress and in 1906 he presided over the National Industrial Conference held at Calcutta. He discerned in the advent of the Co-operative movement, an excellent instrument to benefit the community and did his best to popularise the movement. Was connected with several industrial and commercial concerns and interested himself in education and social reform. Was joint managing agent of the Hindoostan Mill, the Indian Manufacturing Co., the Western India Mill and the Hongkong Mill. Purchased the old Dhun Mill in 1902 and converted it into the Crown Mill which has worked profitably even during bad times. Was Chairman of the Millowners' Association for 1906 and 1907 and member of the Indian Factory Commission in 1908 and was unable to accept the Shrievalty of Bombay for the same year on account of his engagements on the Factory Commission. Was a practical worker for the housing of the poor and the formation of Agricultural Banks and Co-operative Societies. Took an intelligent part in the debates on currency, railway extension and Indian mining in the Legislative Councils. Represented the Millowners' Association on the Bombay Port Trust from 1913 to 1921 and here his work and co-operation were appreciated highly by the Port Trustees, the millowners and the public. Was Chairman of the Bombay Central Co-operative Bank and provided funds from his own resources for night schools for the illiterate members of the Co-operative Societies. Also advanced loans to students for higher study without any interest. Endowed a hall in Bombay for the use of the mill operatives and handed it over to the Social Service League. In recognition of his public services in the cause of Co-operative Societies a build-

ing has been erected in Bombay from public funds for the benefit of Co-operative Societies and named Sir Vithaldas D. Thackersey Memorial Hall. The Maharastra Women's University and the Seva Sadan Society owe their present position very largely to his princely munificence; he also helped the Social Service League, the Vanita Vishram and other benevolent organisations. Visited England in 1919 and gave evidence before the Finance and Currency Commission as the representative of the Indian Merchants' Chamber. Elected member of the Legislative Assembly in 1921. Died in 1922. (P. 125.)

The Late
VURJIVANDAS MADHOWDAS.

An enlightened member of the Kapol Bania community in Bombay and a great social reformer. Was among the earliest of Bombay citizens to finance the floating of cotton mill companies and was one of the first directors of the Oriental Mill started in 1860. He was also interested in other joint stock concerns and banking institutions. Was a member of the Municipal Corporation and the Port Trust and a director of the Bank of Bombay and a Fellow of the Bombay University. (P. 244.)

WACHA, HON. SIR DINSHAW EDULJI, Kt.

Sir Dinshaw Wacha has been a devoted worker in the cause of efficient municipal government in Bombay, and an ardent advocate of industrial progress. Few Indians have taken as keen and consistent an interest in the advancement of the people, in politics, in education, in social reform, in local self-government and in industrial and economic questions as Sir Dinshaw Wacha. Born in Bombay in 1844 and educated at the Elphinstone College he has lived to see the progress and prosperity of the city of his birth by the expansion of the textile industry with which he has been intimately associated for 53 years. Served as an assistant in 1868 in the firm of Brodie and Wilson, public accountants in Bombay, and subsequently became associated with Mr. Muncherji Banaji in the management of the New Great Eastern Mills and the City of Bombay Mills. Worked with Mr. Jamsetji Tata as a salaried partner in the agency of the Swadeshi Mills till 1890 from which year he has been connected with the firm of Morarji Gocouldas & Co. Has been a valued and active member of the Millowners' Association for 38 years and its President for 1917. Member of the Indian Merchants' Chamber and its Chairman for 1916. A Trustee of the V. J. T. Institute since 1902 and its Hon. Secretary for 20 years. One of the most distinguished members of the Municipal Corporation for the City of Bombay for 30 years and its President for 1901-02. Member of the Bombay Improvement Trust since its establishment in 1898 to 1919. General Secretary of the Indian National Congress for 18 years and its President for 1901. President of the Belgaum Provincial Conference in 1894, and of the Western India Liberal Association since 1919. The most active Secretary of the Bombay Presidency Association for 30 years and its President for 1915-16. President of the First Provincial Liberal Conference held in Bombay in 1922. Gave evidence in London before the Royal Commission on Indian expenditure in 1896. Member of the Bombay Legislative Council in 1915-19 and member of the Council of State from 1920. A Governor of the Imperial Bank of India and Director in the Central Bank of India, and the Scindia Steam Navigation Company. A prolific writer on important and useful subjects including currency, economics and finance. A living authority on the history and working of local self-government in Bombay, the textile industry and banking and industrial concerns. A valued contributor to the leading newspapers and periodicals in India and author of "History and Share Speculation, 1863-64," "Life of Jamsetji Tata," "Life of Premchand Roychand," "The Rise and Growth of Bombay's Municipal Government," "My Recollections of Old Bombay," and several papers on Indian Commerce, Statistics, Agricultural Conditions in India, on Railway and on Military Expenditure. (P. 268.)

The Late
WADIA, BAPUJI P.

Auditor and Accountant (see page 281).

WADIA, C. P.

Partner in the firm of P. A. Hormarjee & Co., Agents of the Moon Mills. (P. 263.)
(See Wadia, Pestonjee A. Hormarji.)

The Late
WADIA, NOWROJEE MANEKJEE, C.I.E.

One of the wealthiest members of the Parsi community in Bombay. Traded with Europe in partnership with his brother and travelled over different parts of the world being personally received in 1863 by Emperor Napoleon III. The business was closed in 1868 after which Mr. Wadia devoted his time and fortune to other mercantile pursuits including cotton mills. Was director of the Colaba Land Mill and projected the Jehangir Wadia Mill. Gave away large sums in charity during his life-time and endowed at his death practically the whole of his fortune, reckoned at one crore of rupees, for cosmopolitan charity. Born in 1837, died in 1909. (P. 244.)

The Late
WADIA, NUSSERWANJI ARDESHIR.

Born in 1832 Mr. Wadia was a contemporary of Mr. Bomanji Warden with whom he formed the first batch of Indians who entered workshops for practical training in mechanical engineering. While only 17 years of age Mr. Wadia made his mark as a clever mechanic and was sent to Manchester to select the machinery and engines for the Victoria Mills projected in Bombay by D. M. Petit & Sons. Mr. Wadia was also connected with the Royal Mills (now the Dinshaw Petit) and the Oriental Mills and was also consulting engineer and director of other concerns. He died in 1891 at the age of 59, his mantle as an expert engineer and manager having fallen on his sons Naorosji and Sorabji and his grandsons Nusserwanji and Curvetji.

The Late
WADIA, NAOROSJI NUSSERWANJI, C.I.E.

Mr. Wadia was one of the best known of citizens connected with the mill industry. Born in Bombay in 1849 he was sent to a school in Liverpool and returned in 1866. Was appointed manager of the Albert Mills in 1870 and of the Manekji Petit Mills in 1874. Founded the firm of Naorosji Wadia & Sons in 1878. Designed and built the National Mill, the Neriad, the Dhuri, the E. D. Sassoon, the David, the Presidency, the Currimbhoy, the Wadia Mill, the Indo-China, the Tricumlal, Jehangir Wadia and the Calicut Mills. Designed and erected the largest cotton mill engine in the world for the Manekji Petit Mills in Bombay in 1884. Started the Dye Works at Mahim in 1880 in partnership with Mr. William Reid. Was the most active worker in the establishment of the V. J. T. Institute and acted as its Hon. Secretary from 1888 until his death in 1895. Received the title of C.I.E. in 1890 in recognition of his services in the development of the textile and engineering industries and technical education for the youths of this Presidency. Was elected a member of the Bombay Legislative Council and Associate of the Institute of Civil Engineers and Member of the Institute of Mechanical Engineers, London. Acted as consulting engineer and textile expert for a large number of the cotton mills in Bombay. Projected and designed the Textile Mill and the Century Mill which have ranked among the most successful and prosperous of industrial concerns in the Presidency. (Pp. 83, 569, 647.)

WADIA, C. N.
C.I.E.

Partner in the firm of C. N. Wadia & Co., Agents of the Century Mill. Received practical training as a mill manager and engineer under his father Mr. N. N. Wadia, C.I.E., at the Manekji Petit Mill. Mr. C. N. Wadia has been an active worker on the Committee of the Millowners' Association of which he was Chairman for 1918, elected member of the Bombay Legislative Council for 1924–5-26 by the Millowners' Association.

WADIA, SIR NESS.
B.A. (Cantab.), C.I.E., M.I.M.E.

Born in Bombay in 1873 and matriculated in 1890. Received practical training at the works of British engineers and machinery manufacturers and at the cotton mills in Bombay. Sir Ness Wadia is a prominent millowner and one of the most accomplished of technical experts. Was Chairman of the Millowners' Association in 1917 and 1925. Took an active part in the agitation against the continuance of the Excise Duty and was mainly responsible for its withdrawal in 1925. One of the most ardent well wishers of the labouring classes in Bombay and endowed Rs. 16 lakhs for the Wadia Maternity Hospital for the female workers in factories in memory of his father, the late Mr. N. N. Wadia, C.I.E. Is managing director of the Bombay Dyeing and Manufacturing Co., Ltd., comprising the Textile and the Spring Mills, two of the most prosperous concerns in the city. Senior partner in the old established firm of Naorosji Wadia & Sons, who are Indian Agents for Platt Brothers & Co., Ltd., Hick Hargreaves & Co., Ltd., Wilson Brothers Bobbin Co., Ltd., and Eadie Bros. & Co., Ltd. Received the honour of C.I.E. in 1918 and K.B.E. in 1926 in recognition of his public services and philanthropy. (Pp. 84, 507 to 512, and 647.)

The Late
WADIA, SORABJI NUSSERWANJI.

One of the most proficient of mill engineers from an early period of the mill industry in Bombay. Born in 1850 he was sent to Manchester in 1863 for education and factory training along with his brother Mr. Naoroji N. Wadia. He made satisfactory progress in his studies and also in music, his fine voice securing for him a place on the Choir of the City Church of Manchester. On his return to Bombay in 1867 he was apprenticed at the Albert Mills and in 1870 joined the Maragon Mill of which he became manager in 1875. He was one of the earliest of the local engineers to pass the Bombay Boiler Act examination for mechanical engineers in the First Class. Acted as consulting engineer and erected several of the large mill engines in Bombay. A well educated man he kept up his literary taste along with his technical progress but his promising career as an expert mill manager was cut short by death at the early age of 45. Born 1850, died 1895. (P. 299.)

The Late

WADIA, PESTONJEE A. HORMARJEE.

Among the sons of wealthy merchants and millowners Mr. Pestonjee Wadia was one of the first to join a cotton mill as an apprentice and learn practical work. This was at the Alexandra Mills in 1877 under Mr. M. C. Rattagan who was then manager. A well-educated and energetic worker Mr. Wadia was found fit after three years' training to be engaged as an assistant manager at the Coorla Mills which was under the agency of his father Mr. Ardeseer Hormarjee Wadia. He was promoted and acted as chief manager from 1882 to 1887 and then projected the China Mill of which he was appointed Agent from 1888. The success of this mill encouraged him to launch the Moon Mills in 1890 and both concerns were worked by him with continued success and profits under the style of P. A. Hormarjee & Co. Mr. Wadia who died in February 1924 had the advantage of the active assistance of his sons Nusserwanjee and Cursetjee who had also received practical training in cotton spinning and contributed materially towards the prosperity of the China Mill and the Moon Mill. Mr. Pestonjee Wadia bequeathed the sum of Rs. 10 lakhs by his will for the relief of distress among the members of the Parsi community and for their housing accommodation. (P. 293.)

WADIA, JAMSETJI ARDESHIR.

Intimately connected with the mill industry in Bombay as Agent and Director of the Currimbhoy Ebrahim group of mills. Born in Bombay in 1859 Mr. Wadia graduated from the Elphinstone College and served his apprenticeship in a mercantile house in London. Has been a member of the Municipal Corporation and the Millowners' Association for many years and has taken an active and intelligent part in the deliberations of these bodies. Has been a contributor to the local press on currency and economic subjects and on the financial position and working of the cotton mills. (P. 256.)

The Late

WARDEN, BOMANJEE FRAMJEE.

One of the earliest of Indians to take up mechanical engineering as a profession. Born in 1828 in Bombay he entered the British Indian Marine Dockyard as an apprentice fitter at the age of 15, his contemporary being Mr. Nusserwanji Ardeshir Wadia, father of Mr. N. N. Wadia, C.I.E. Mr. Warden rose to be the foreman of the dockyard in the smithy shop and his general intelligence and skill as an engineer drew the attention of Mr. Limji Bathiboi who owned steamships and engaged Mr. Warden as chief engineer. The vessels were sent to Hongkong and Shanghai and detained by the British when the war broke out between England and China. On his return to Bombay he was engaged by Mr. Dadabhoy Navoroji for the firm of Cama Brothers and sent to England to bring out the steamships "John Bright" and "Indente" the engines of which were fitted under his supervision. Returning to India in 1863 he erected the engines at the pioneer cotton mills of Mr. Ranchorlal Chotalal at Ahmedabad and at several mills in Bombay. He also served as engineer in charge of the Government Hydraulic Press and the Nicol Mill in Bombay for 10 years and was then put in charge of the Oriental Mills at Tardeo and Colaba where he served till his death in 1885. (P. 299.)

WARDEN, HIRJEEBHOY BOMANJEE.

Connected for many years with the Oriental Mills as manager. Began life as an apprentice in 1817 at the Archwrite Mill. Became a mule fitter in 1866 at the Bombay Spinning Mills of Mr. Cawasjee Davar at Tardeo, and after a few years of practical work he joined the spinning department of the Manekjee Petit Mills as assistant under Mr. Aspin the then manager. Two years later he was put in charge of the mule and throstle departments of the Victoria Mills where his father Mr. Bomanjee Warden was manager. Joined the Mazagaon Mills as spinning master in 1877. On the death of his father in 1885 he succeeded to the position of manager of the Oriental Mills at Tardeo and Colaba and the National Mill at Parel. He remained in this post till 1897 when he went to Europe for a change. Was manager of the Victoria Mill from 1899 to 1909 when he retired. (P. 111.)

WHADDIA, N. P.

Partner in the firm of P. A. Hormarjee & Co., Agents of the Moon Mills. (P. 293.)
(S.: Wadia, Pestonjee A. Hormarjee.)

The Late

WALLACE, JOHN.

C.B.

One of the most accomplished of British engineers who have worked for the advancement of technical education among Indian youths and the betterment of artisans and craftsmen. Was joint-editor of the engineering section of the *Indian Textile Journal* from 1893 till his death in 1921. Born in Liverpool in 1842 he was educated at King's College, London, and served his apprenticeship at Sharp Stewart & Co., Manchester,

became foreman and manager of Tangyes Brothers, Newcastle, and of other works. Also served in the Loco department of the Great Northern Railway and the Phœnix Gas Works in London and in the mines and iron works in the north of England. Went over to Cairo in 1870 as engineering expert to the Egyptian State Railways and served as a volunteer in the Egyptian Expedition of 1882 under Sir Charles Beresford. Acted as the Head of the Fire Brigade and in other capacities during the bombardment of Alexandria by the British Fleet and was awarded the Silver and Bronze Star of the Expedition while the Egyptian Government rewarded him with the Medjidieh of the Official Grade. Was engaged by the Civil authorities to report on the sanitary condition of Cairo and in 1883 he submitted a scheme for the drainage of the city with Mr. L. F. Cornish, M.I.C.E. Mr. Wallace began practice in Bombay in 1886 as a consulting expert, his training as a civil and mechanical engineer and his accomplished writer on scientific and technical subjects being exceptionally high. As joint-editor of the *Indian Textile Journal* he did useful work by disseminating technical and scientific knowledge. He also delivered lectures on sanitation, on the ventilation of factories and the training of Indian artizans and factory workers. Was a trustee of the V. J. T. Institute, a member of the Committee of the Teachers' Association and the Jacob Sassoon School in Bombay. Was acting Principal of Sir J. J. School of Arts where he introduced important reforms in the workshops which were acknowledged by the Bombay Government who engaged his services for reporting on a scheme of Technical Education for the Presidency. Although trained originally in the designing and working of heavy industrial machinery Mr. Wallace devised special tools and appliances to suit the means and capacity of the Indian carpenter and *mistry* and rendered gratuitous services to work-classes and charitable institutions. Conspicuous amongst these was the orphanage workshop of the Sisters of All Saints in Bombay for which he devised special implements for lead work and seed drilling which found profitable employment for the inmates of the Home. As an expert draftsman Mr. Wallace enjoyed considerable reputation. The elastic gas-tight lid for gas retorts which has been in universal use was invented by him and in 1876 he designed a three (parallel) cylinder steam engine with flywheel governor for the Victoria University at Manchester. He was the first in 1870 to apply the steam jet exhauster to the charging of centrifugal pumps and invented and devised the high-temperature solid flame gas burner which was acknowledged to be an improvement on the ordinary burner of those days. With qualifications such as these Mr. Wallace spent 36 years of his life among Indian engineers, foremen, mechanics and craftsmen, who found in him a willing teacher and instructor while the large factory owners availed themselves of his superior knowledge in the equipment of workshops with tools and machinery specially adapted to the training and capacity of Indians. Died in Bombay in 1921. (P. 670.)

WILSON, HIS EXCELLENCY THE RT. HON. SIR LESLIE ORME

P.C., G.C.I.E., C.M.G., D.S.O.

GOVERNOR OF BOMBAY.

Sir Leslie Wilson became Governor of Bombay in 1923 after a distinguished record of services in the Army and in Parliament. Born in 1878 he was educated at St. Michael's, Westgate, St. Paul's School. Joined military service in 1895 as 2nd Lieut. in the R.M.L.I. becoming Captain in 1901. Was severely wounded while serving in the South African War of 1899-1901; was mentioned in the despatches and received the Queen's Medal, 5 clasps and D.S.O. Acted as A.D.C. to the Governor of New South Wales. Was attached to the Berkshire Royal Horse Artillery (Territorials) as Captain and then promoted temporary Lieut.-Col. Royal Marines, and commanded Hawke Battalion of the Royal Naval Division. Served through the operations in Gallipoli in 1914-15 and was mentioned in the despatches. C.M.G. Served in France during the war in 1915-16 being wounded several times and in 1918 became Parliamentary Assistant Secretary to the War Cabinet. In the following year he was appointed Chairman of the National Maritime Board and Parliamentary Secretary to the Ministry of Shipping. In 1921-22 he was Parliamentary Secretary to the Treasury and Chief Whip. Was member of Parliament (Unionist) for Reading from 1913 to 1922 and member for South Portsmouth for 1922-23. Appointed Governor of Bombay in 1923 in which position His Excellency has fulfilled the best expectations of the people for his judicious and sympathetic administration and his regard for the welfare of the labouring classes in particular. During the periods of the protracted strikes of the mill hands in Bombay in 1924 and 1925 Sir Leslie Wilson's intervention proved of the greatest value to the employers and the workpeople while his zeal for providing extended hospital accommodation and medical relief has encouraged the establishment of the Nowrosji Wadia Maternity Hospital and similar institutions within the last three years. His Excellency's interest in the progress of trade and commerce and the industries of this Presidency have been manifest in his speeches at the meetings of the Bombay Chamber of Commerce and the Millowners' Association. The abolition of the Excise Duty was also due in a great measure to His Excellency's suggestions to the Central Government. (P. 273.)

Chronological List of Important Events.

1836 Establishment of the Bombay Chamber of Commerce.

1850 Opening in Bombay of the pioneer Foundry and Iron Works in the Presidency by Mr. Sorabji Shapurji.

1851 The Bombay Spinning Mill—the pioneer cotton mill in India—projected by Mr. Cawosji Nanabhoy Davar.

1854 Transfer of the Bombay Cotton Green from Elphinstone Circle to Colaba.

1860 Inauguration of the Agency System for Bombay Cotton Mills.
Rapid growth in mill building in Bombay.

1861 Commencement of the American Civil War.

1865 Bombay's export trade in yarn began with China.
American Civil War and crisis in the Bombay Mill Industry with financial failures.

1870 Better prospects for Bombay Mills.

1873 Bombay Port Trust established.

1874 Manchester pressed for repeal of duty on yarn imported into India.

1875 Establishment of the Bombay Millowners' Association.
Another Factory Commission appointed.

1878 Repeal of import duty on Manchester goods.

1880 Increase in Cotton Mill building in Bombay.
Exports of Bombay yarns to China began to increase.

1881 The first Factory Act passed.

1884 Another Factory Commission appointed.

1885 General introduction of Ring Spinning and Flat Cards in Bombay Mills.

1887 Formation of the Native Share and Stock Brokers' Association in Bombay.

1889 The first batch of Japanese merchants came to Bombay to buy Indian Cotton for Japan.
First lot of 32 bales of Indian Cotton shipped to Japan.
Establishment in Bombay of the Victoria Jubilee Technical Institute.

1890 Foundation of the *Indian Textile Journal* in Bombay.
Japan began to import Indian Cotton.

1891 Amended Factory Act passed.
Bombay Millowners considered the question of standardized wages but did not come to any decision.
International Congress of Hygiene and Mr. Holt-Hallet's attack against the condition of Factory Labour in India.

1892 New Factory Act introduced.

1893 Indian Mints closed to the free coinage of silver.
The Bombay Mills went through severe monetary crisis.
Japanese merchants began shipping cotton from Bombay to Japan.

1893 Introduction of Aniline and Alizarine dyes into Bombay Mills by German manufacturers.
First introduction of Electric Lighting in Bombay Cotton Mills.
Short time in Bombay Mills.
Japan-Bombay Line of Steamers started and discontinued in 1894.

1894 Import duties on Manchester goods reimposed.

1895 The first Japanese office opened in Bombay for shipping cotton to Japan.

1896 Imposition of Excise Duty on Indian-made cloth.
Outbreak of plague in Bombay.

1897 Plague and famine in the City and Presidency.

1898 Short time in Bombay Mills.
Import duty on cotton and export duty on yarn abolished in Japan.

1899 Short time in Bombay Mills and general depression.

1900 Japan began erecting her own mills.
Establishment of the Bombay Textile and Engineering Association.
Crisis in China.
Second Famine in the Bombay Presidency.

1903 Bombay Mills began to recover from the effects of plague and famine.
War between China, Japan and Russia.
Exports of Bombay yarn to China began to fall.

1904 Brighter prospects for the Bombay Mills.

1907 Third Factory Commission appointed.
Formation of the Indian Merchants' Chamber.
The Finlay Mill—the first complete electrically driven Cotton Mill in India—was started in Bombay by Messrs. James Finlay & Co., Ltd.
Short time adopted for Bombay Cotton Mills.
Failure of Bombay merchants on account of famine in China and fall in prices of Indian yarn.
Duty on silver was enhanced and no yarn was shipped to Japan.

1908 Factory Commission's Report published.
Mill riots in Bombay.

1909 New Factory Act passed.

1910 The Tata Hydro-Electric Power Supply Co., Ltd., registered.
Short time in Bombay Mills and trade depression.

1911 New Factory Act passed.
New Patents and Designs Act for India came into force.
Better prospects for Bombay Cotton Mills.

1913 Welfare Work for Bombay Mill operatives commenced by Social Service League.
Bank failures in Bombay.

1914 Commencement of the World War.
Stoppage of Mill building in Bombay.

1915 Bombay Cotton Mills commenced working with Electric Power Supply from the Tata Hydro-Electric Works.

1917 Better times for Bombay Mills.

1918 End of the World War.
Tata Sons Workmen's Institute and the Curtimbhoy Ebtidam Workmen's Institute started.
Boom period began for Bombay Mills.

1919 Extensions in existing Mills in Bombay.
Formation of the Bombay European Textile Association.
Mill strikes in Bombay.

1919 Formation of the *Girni Kamgar Sangh*—the first Trade Union of textile mill workers in Bombay.

1920 Strikes in Bombay Mills.

1921 Starting of The Premier Mill in Bombay, being the only one erected since 1914 and the last in the City.
Labour Dispute Committee appointed in Bombay.

1922 Formation of the East India Cotton Association.
Indian Factories Act amended.

1922 Smoke Nuisance Committee appointed in Bombay.
Opening in Bombay of the Working Men's Institute by the Social Service League.

1923 Indian Cotton Cess Act passed.
Cotton Mill strikes in Bombay.
Bonus Dispute Committee appointed in Bombay.
Depression began in the Textile Industry in Bombay.
Millowners' Association separated from the Bombay Chamber of Commerce and established their own organization.
Bombay Millowners demanded the repeal of the Excise duty.
Formation of the Bombay Millowners' Mutual Insurance Association, Ltd.
Formation of the Indian Central Cotton Committee.

1924 Strike of Bombay millhands.
Protest meeting of Bombay Millowners against Excise duty.

1925 Opening of the New Cotton Exchange building in Bombay.
Workmen's Compensation Act came into force.
Repeal of the Excise duty.
The longest strike of millhands in Bombay.

1926 Formation of the Bombay Textile Labour Union.
Opening of the Nowrosjee Wadia Maternity Hospital in Bombay for mill operatives.
Enquiry by the Cotton Textile Industry Tariff Board into the causes of the depression in the Mill Industry in Bombay.
Starting of the Toyo Podar Mills in Bombay, the first to be financed and owned by the Japanese.

1927 Report of the Cotton Textile Tariff Board published.
Conference of all-India Millowners held in Bombay to protest against the decision of Government on the Textile Tariff Board Report.
Deputation of Indian Millowners discussed with the Viceroy the position of the Mill Industry and the Tariff Board Report.

(Ending July 31st, 1927.)

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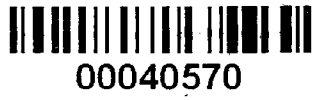
Printed by C. MORRIS for G. CLARIDGE & CO., LTD., at the Caxton Printing Work[illegible] Frere Road, Bombay, India, and published by S. M. RUTNAGUR for THE INDI[illegible] TEXTILE JOURNAL LIMITED, at Military Square, Medows Street, Fort, BOMBAY, IND[illegible]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